INCH-POUND
ATPD 2240
9 January 1998
SUPERSEDING
MIL-T-62340 (AT)
14 March 1998

PURCHASE DESCRIPTION

TANK, COMBAT, FULL-TRACKED, M1 SERIES; PROCESSING FOR SHIPMENT AND STORAGE OF

This purchase description is approved for use by the U.S. Army Tank-automotive and Armaments Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the processing of the M1 series full-tracked combat tank for shipment and storage meeting the requirements of levels A and B preservation. The M1 series includes the M1, IPM1, M1A1, and M1A2 tanks (see 1.2 and 6.1).

1.2 Classification. Processing consists of the following levels as specified (see 6.2):

Level A	-	Processing for domestic or overseas shipments and any storage outside of buildings in excess of 90 days from date of processing (periodic care and preservation during storage required).
Level B	-	Limited processing for immediate use shipment and for domestic or overseas shipments (excluding open deck loading), and any storage not to exceed 90 days from date of processing.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A AREA PACK

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this purchase description. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirement documents cited in sections 3 and 4 of this purchase description, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

A-A-374	- Sodium Bicarbonate, Technical.
A-A-1507	- Chipboard.
A-A-1800	- Varnish, Oil: Spar.
A-A-50177	- Paper, Lens.
A-A-52520	- Hardwood; Floorboards and Platforms: for Military Vehicles (Metric).
A-A-55057	- Panels, Wood/Wood Based; Construction and Decorative.
O-C-1901	- Cleaning Compound, Windshield (Solvent and Anti-Freeze, Concentrated).
O-E-760	- Ethyl Alcohol (Ethanol); Denatured Alcohol; Proprietary Solvents and Special Industrial Solvents.
O-S-801	- Sulfuric Acid, Electrolyte (for Storage Batteries).
P-D-220	- Detergent, General Purpose.
P-D-680	- Dry Cleaning and Degreasing Solvent.
T-R-650	- Rope, Yarn and Twine, Bast Fiber.
V-F-106	- Fastener, Slide, Interlocking.
V-T-295	- Thread, Nylon.
QQ-A-250/1	- Aluminum 1100, Plate and Sheet.
QQ-A-250/8	- Aluminum Alloy 5052, Plate and Sheet.

QQ-A-250/11	- Aluminum Alloy 6061, Plate and Sheet.
QQ-A-1876	- Aluminum Foil.
RR-W-410	- Wire Rope and Strand.
TT-C-490	- Cleaning Methods for Ferrous Surfaces and Pretreatments for Organic Coatings.
TT-E-527	- Enamel, Alkyd, Lusterless, Low VOC Content.
TT-E-529	- Enamel, Alkyd, Semigloss, Low VOC Content.
UU-T-81	- Tags, Shipping and Stock.
WW-T-700/6	- Tube, Aluminum Alloy, Drawn, Seamless, 6061.
MMM-A-179	- Adhesive: Paper Label.
MMM-A-1617	- Adhesive, Rubber Base, General Purpose.
PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP-B-621	- Boxes, Wood, Nailed and Lock-Corner.
PPP-C-1752	- Cushioning Material, Packaging, Polyethylene Foam.
PPP-C-1797	- Cushioning Material, Resilient, Low Density, Unicellular, Polypropylene Foam.

DEPARTMENT OF DEFENSE

MIL-B-121	- Barrier Material, Greaseproofed, Waterproofed, Flexible.
MIL-B-131	- Barrier Materials, Watervaporproof, Greaseproof, Flexible, Heat-Sealable.
MIL-C-450	- Coating Compound, Bituminous Solvent Type, Black (for Ammunition).
MIL-W-530	- Webbing, Textile, Cotton, General Purpose, Natural or in Colors.
MIL-R-3065	- Rubber, Fabricated Products.
MIL-PRF-3150	- Lubricating Oil, Preservative, Medium.
MIL-P-3420	- Packaging Materials, Volatile Corrosion Inhibitor Treated, Opaque.
MIL-C-5541	- Chemical Conversion Coatings on Aluminum and Aluminum Alloys.
MIL-L-6081	- Lubricating Oil, Jet Engine.
MIL-I-8574	- Inhibitors, Corrosion, Volatile, Utilization of.
MIL-PRF-10924	- Grease, Automotive and Artillery.
MIL-PRF-16173	- Corrosion Preventive Compound, Solvent Cutback, Cold-Application.
MIL-C-16555	- Coating Compound, Strippable, Sprayable.
MIL-D-16791	- Detergents, General Purpose (Liquid, Nonionic).
MIL-P-17667	- Paper, Wrapping, Chemically Neutral (Non-Corrosive).

MIL-C-20696	- Cloth, Coated, Polyester or Nylon, Waterproof.
MIL-L-21260	- Lubricating Oil, Internal Combustion Engine, Preservative and Break-In.
MIL-T-22085	- Tapes, Pressure-Sensitive, Adhesive, Preservation and Sealing.
MIL-F-22191	- Barrier Materials, Transparent, Flexible, Heat Sealable.
MIL-C-46168	- Coating, Aliphatic Polyurethane, Chemical Agent Resistant.
MIL-H-46170	- Hydraulic Fluid, Rust Inhibited, Fire Resistant Synthetic Hydrocarbon Base.
MIL-T-50036	- Talc, Technical, T1 and T3.
MIL-S-53021	- Stabilizer Additive, Diesel Fuel.
MIL-P-53022	- Primer, Epoxy Coating, Corrosion Inhibiting, Lead and Chromate Free.
MIL-P-53030	- Primer Coating, Epoxy, Water Reducible, Lead and Chromate Free.
MIL-C-53039	- Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant.
MIL-C-81309	- Corrosion Preventive Compounds, Water Displacing, Ultra-Thin Film.
MIL-W-83420	- Wire Rope, Flexible, for Aircraft Control.
MIL-C-85054	- Corrosion Preventive Compound, Water Displacing, Clear (AMLGUARD).

STANDARDS

FEDERAL

FED-STD-595	- Colors Used in Government Procurement.
FED-STD-751	- Stitches, Seams and Stitching.

DEPARTMENT OF DEFENSE

MS16842	- Clamp, Wire, Rope, Saddled, Single Grip, Steel.
MS51922	- Nut Self-Locking, Hexagon-Prevailing Torque, General Purpose, 250 Deg. F, UNC-2B and UNF-2B.
MS51839	- Elbow, Tube to Boss, 90 Deg., O-Ring, Flareless Type, Hydraulic.
MS51843	- Adapter, Straight, Tube to Boss, O-Ring, Flareless Type, Hydraulic.
MIL-STD-129	- Marking for Shipment and Storage (Part 1 of 4 Parts).

MIL-STD-2073-1 - Military Packaging, Standard Practice for.

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

9338559	- Crosswind Sensor.
10910174	- Hook.
12273961	- Accessory Assembly-Loader Weapon.
12274063	- Accessory Assembly-Coax Weapon.
12275001	- Hook.
12282500	- Crosswind Velocity Sensor.
12282741	- Headlight Bracket.
12287287	- Headlamp Assembly.
12549035	- Bracket Assembly.

TECHNICAL MANUAL

AK13311526	- Special Packaging Instruction (SPI).
TM 9-6140-200-14	- Lead Acid Storage Batteries.

PURCHASE DESCRIPTION

ATPD 2241	- Vehicles, Wheeled: Preparation for Shipment and Storage of.

(Copies of the above Government documents, drawings, and publications are available from the U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A36	- Standard Specification for Carbon Structural Steel (DoD Adopted).
ASTM A108	- Standard Specification for Steel Bars, Carbon, Cold-Finished, Standard Quality (DoD Adopted).
ASTM A366	- Standard Specification for Steel, Sheet, Carbon, Cold-Rolled, Commercial Quality (DoD Adopted).
ASTM A500	- Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes (DoD Adopted).
ASTM A501	- Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing (DoD Adopted).
ASTM A513	- Standard Specification for Electric-Resistance-Welded Carbon and Alloy Steel Mechanical Tubing (DoD Adopted).
ASTM A569	- Standard Specification for Steel, Carbon (0.15 Maximum, Percent), Hot-Rolled Sheet and Strip Commercial Quality (DoD Adopted).
ASTM A576	- Standard Specification for Steel Bars, Carbon, Hot-Wrought, Special Quality (DoD Adopted).
ASTM B221	- Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (DoD Adopted).
ASTM B241	- Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube (DoD Adopted).
ASTM D1974	- Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Boxes (DoD Adopted).
ASTM D2000	- Standard Classification System for Rubber Products in Automotive Applications (DoD Adopted).
ASTM D4066	- Standard Specification for Nylon Injection and Extrusion Materials (DoD Adopted).
ASTM D5118	- Standard Practice for Fabrication of Fiberboard Shipping Boxes (DoD Adopted).
ASTM D5330	- Standard Specification for Pressure-Sensitive Tape for Packaging, Filament-Reinforced (DoD Adopted).
ASTM D5486	- Standard Specification for Pressure-Sensitive Tape for Packaging, Box Closure, and Sealing (DoD Adopted).

ASTM E437	- Standard Specification for Industrial Wire Cloth and Screens (Square Opening Series) (DoD Adopted).

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/AWS A5.10	- Specification for Bare Aluminum and Aluminum Alloy Welding Electrodes and Rods (DoD Adopted).
ANSI/AWS D1.1	- Structural Welding Code Steel (DoD Adopted).

(Application for copies should be addressed to the American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.)

ASSOCIATION OF AMERICAN RAILROADS (AAR)

AAR Manual, Section 1	- General Rules Governing Loading of Commodities on Open Top Cars.
AAR Manual, Section 6	- Rules Governing the Loading of Department of Defense Materiel on Open Top Cars.

(Application for copies should be addressed to the Association of American Railroads, Publication Department, 50 F Street NW, Washington, DC 20001-1564.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.3.

3.1.1 Disassembly. Projecting parts whose removal will accomplish desired cube reduction and parts susceptible to damage or pilferage shall be removed from the vehicle. Except as otherwise specified herein, removed bolts, nuts, screws, pins, and washers shall be placed in one of the mating parts and secured. Removed parts shall be preserved, packaged, and packed in

accordance with the individual document for the specific item or in accordance with applicable provisions of MIL-STD-2073-1. Packed parts shall be identified as to contents and stowed securely within the vehicle.

3.1.2 Matchmarking. Parts removed from vehicle shall be matchmarked when necessary to facilitate reassembly. Matchmarking information shall be put on cloth shipping tags conforming to type A of UU-T-81 and attached to mating parts. The marked cloth shipping tags shall be waterproofed with varnish conforming to A-A-1800 or adhesive conforming to MMM-A-179.

3.1.3 Preservation forms. Two copies of DD Form 1397 shall be provided with each vehicle. Information on forms shall include preservation accomplished and depreservation instructions. The equipment log book binder and one copy of DD Form 1397 shall be placed in a heavy duty, waterproof, transparent bag. The bag shall be closed by heat sealing and securely attached inside the vehicle. The other copy of DD Form 1397 shall be placed in a heavy duty, waterproof, transparent bag. The bag shall be closed by heat sealing, stapling or taping and secured to the 50 caliber equilibrator with 2 adjustable, self-clinching, tiedown straps.

3.1.4 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.2 Cleaning and drying.

3.2.1 Interior of vehicle. Interior of the vehicle shall be cleaned with a solution of detergent conforming to P-D-220, or type I of MIL-D-16791, and warm water. Water, or other liquid under pressure, or steam cleaning shall not be used. Care shall be taken during cleaning to assure that no liquids enter instruments, connectors, or other components susceptible to damage.

3.2.2 Battery supports and retainers. Battery supports and retainers shall be cleaned with a solution of one-half pound of sodium bicarbonate conforming to A-A-374 per gallon of water. Cleaned surfaces shall be flushed with clean water, then thoroughly dried. Dried surfaces shall then be preserved in accordance with 3.3.2.

3.2.3 Backrests, seats, headrests, and crash pads. Cushion components shall be cleaned with a solution of detergent conforming to P-D-220 or type I of MIL-D-16791, in warm water. Cushions shall be wiped with solution-soaked cloths and then rinsed with clean water to remove detergent solution. Care shall be taken not to saturate the cushions with detergent solution or water. After rinsing, cushions shall be dried, then protected in accordance with 3.4.15.

3.2.4 Exterior of vehicle. Exterior of vehicle shall be cleaned using a solution of detergent conforming to P-D-220 or type I of MIL-D-16791 in water or steam. Cleaning shall remove all foreign matter. Cleaned surfaces shall be rinsed with clean water or steam and thoroughly dried. Care shall be taken to avoid entry of water or steam into the engine compartment, turret ring, commanders station, personnel heater exhaust tube, air cleaner ports, or other vehicle openings.

3.2.5 Gun. When inspection indicates the need for reprocessing of gun (see 4.5.2.3), gun shall be thoroughly cleaned with solvent conforming to P-D-680 and shall be thoroughly dried with clean, dry, lint free cloths or specially prepared paper wiping towels.

3.2.6 Fire control, periscopes, and vision blocks. Optical items shall be cleaned in accordance with 3.3.9.

3.2.7 Crosswind sensor. The crosswind sensor shall be cleaned in accordance with 3.2.7.1, 3.2.7.2, and 3.2.7.3.

3.2.7.1 Crosswind sensor (Drawing 12282500). Crosswind sensor conforming to Drawing 12282500 shall be cleaned using the following procedure:

a. Erect crosswind sensor.
b. Using a water source such as a hose or squeeze bottle, clean the air inlets of any dirt or contamination.
c. Stow the crosswind sensor in the stowage rack and secure with strap.
d. Cover the crosswind sensor mount with barrier material conforming to MIL-B-131, class II.
e. Secure the barrier material with tape conforming to MIL-T-22085, type II.

3.2.7.2 Crosswind sensor (Drawing 9338559-1). Crosswind sensor conforming to Drawing 9338559-1 shall be cleaned using the following procedure:

a. Erect crosswind sensor.
b. Using a water source such as a hose or squeeze bottle, clean the air inlets of any dirt or contamination.
c. Stow the crosswind sensor in the stowage rack and secure with strap.
d. Cover the crosswind sensor mount with barrier material conforming to MIL-B-131, class I.
e. Secure the barrier material with tape conforming to MIL-T-22085, type II.

3.2.7.3 Crosswind sensor (Drawing 9338559-2). Crosswind sensor conforming to Drawing 9338559-2 shall be cleaned using the following procedure:

a. Erect crosswind sensor.
b. Using a water source such as a hose or squeeze bottle, clean the air inlets of any dirt or contamination by spraying from the top at a downward angle of approximately 45 degrees.
c. Stow the crosswind sensor in the stowage rack and secure with strap.
d. Cover the crosswind sensor mount with barrier material conforming to MIL-B-131, class I.
e. Secure the barrier material with tape conforming to MIL-T-22085, type II.

3.3 Preservation.

3.3.1 Relubrication. When vehicle has been operated more than 50 miles since lubrication, or after vehicle has been cleaned in accordance with 3.2, the vehicle shall be relubricated using materials conforming to drawings, specifications, or lubrication order applicable to the vehicle. All exposed oil can points, such as, but not limited to, levers, locking bars, strikers, hinges, hinge pins, locking pins, pintle pins, locking levers, wing nuts, latches, door locks, hand-operated locking knobs, linkage, and threaded ends of yokes and related clevis pins, shall be lubricated with oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. Excess lubricant shall be removed after lubrication.

3.3.2 Battery supports and retainers. Battery supports and retainers shall be preserved with compound conforming to MIL-C-450.

3.3.3 Transmission. Transmission shall contain lubricating oil conforming to MIL-L-21260, grade 10, filled to operating level. DD Form 1397 shall be annotated to indicate type and grade of lubricant applied.

3.3.4 Final drives. Final drives shall contain lubricating oil conforming to MIL-L-21260, grade 10, filled to operating level. DD Form 1397 shall be annotated to indicate type and grade of lubricant applied.

3.3.5 Engine preservation. The gas turbine engine shall be preserved in accordance with 3.3.5.1 through 3.3.5.6.

3.3.5.1 Engine fuel and oil system.

3.3.5.1.1 Personnel heater and fuel pump. The personnel heater and fuel pump shall be preserved using the following procedure. Disconnect heater fuel line at elbow MS51839-3SS on input side or heater fuel pump. Attach drain hose to elbow and place the other end of the hose in a drain pan. Drain residual fuel from fuel pump, fuel lines, and personnel heater into drain pan. Reconnect heater fuel lines. Disconnect heater fuel line at elbow MS51839-3SS on output side of heater fuel pump. Attach supply hose from preservative oil tank containing preservative oil conforming to MIL-L-21260, type I, grade 10, to elbow. Turn on preservative oil tank supply pump (5 pounds per square inch (psi)) and pump approximately one quart of preservative oil through the heater fuel pump into the front fuel tank. Disconnect preservative oil tank supply hose and reconnect heater fuel line to elbow.

3.3.5.1.2 Oil system. The oil tank should be filled with new normal seasonal operational oil as specified in the lubrication order. Oil system shall be preserved using the following procedure. Add four, 8 ounce cans of Brayco 599 oil preservative compound (NSN 6850-00-142-9582) or equivalent to the engine oil tank. Run the engine until normal operating temperature is reached. Subsequent running of the engine for short periods is acceptable without represervation of the oil system.

3.3.5.2 Oil tank. After fuel system preservation, oil tank shall be filled to operational level with new normal seasonal operational lubricating oil as specified in lubrication order.

3.3.5.3 Fuel system.

3.3.5.3.1 Fuel pumps and fuel tanks. Each fuel tank shall be drained to the maximum extent possible. Fuel tank caps and filler screens shall be removed and coated on metallic surfaces with preservative oil conforming to type I, grade 10, of MIL-L-21260. One half of a 55 gallon drum of preservative oil conforming to type I, grade 10, of MIL-L-21260 shall be added to each front fuel tank. Tank filler screens and caps shall be reinstalled. The following procedure shall then be performed. Ensure master power is on. Set the fuel tank selector switch in driver's compartment to the right front tank. Open back flush port on fuel pump manifold to bleed air from fuel lines. Close backflush port when preservative oil appears.

NOTE: Any oil spilled from back flush port onto hull floor shall be cleaned up using dry rags and dry cleaning solvent conforming to P-D-680.

WARNING: Dry cleaning solvent P-D-680 is toxic and flammable. To avoid injury, wear protective goggles and gloves and use in a well-ventilated area. Avoid contact with skin, eyes, and clothes, and do not breathe vapors. Do not use near open fire or excessive heat. The flash point for type I dry

cleaning solvent is 100 degrees Fahrenheit (°F) (38 degrees Celsius (°C)), and for type II is 138°F (50°C). If you become dizzy while using dry cleaning solvent, get fresh air immediately and get medical aid. If contact with eyes is made, wash your eyes with water and get medical aid immediately.

Continue pumping until right front tank is dry. Switch fuel tank selector switch to left front tank and repeat the draining procedure. When all the preservative oil has been pumped to the rear tanks, disconnect the main fuel line quick disconnect fitting and open the bleeder valves on the fuel/water separator. Disconnect smoke generator fuel line at adapter MS51843-6SS on input side of smoke generator fuel pump. Drain any residual fuel from pump and lines and reconnect fuel line. Disconnect the quick disconnect fitting on the output side of the smoke generator fuel pump and attach a drain hose to male end of the quick disconnect fitting. Place the other end of the hose in a drain pan. Open drain valves on fuel/water separator and primary fuel filter housing and drain any residual fuel. Remove covers from fuel/water separator and primary fuel filter housing. Set filters aside for possible reuse. Fog and/or wipe interior of primary fuel filter housing and fuel/water separator housing with preservative oil conforming to MIL-L-21260, type I, grade 10. Replace covers on primary fuel filter and fuel/water separator. Turn on smoke generator switch and run engine through a “false start” cycle for approximately 5 seconds to introduce preservative oil into rear pumps. Close bleeder valves and drain rear tanks to the maximum extent possible. Remove covers from primary fuel filter and fuel/water separator and drain any residual preservative oil. If previously removed filters from fuel/water separator and primary fuel filter are not contaminated, reinstall them; otherwise, install new filters and, using new gaskets, replace covers on primary fuel filter and fuel/water separator. Remove drain hose from smoke generator and reconnect quick disconnect fitting.

3.3.5.3.2 Electromechanical fuel unit (EMFU). The electromechanical fuel unit shall be preserved using the following procedure. Disconnect electrical connector from EMFU. Remove engine in-line filter housing and dump fuel. Discard filter element and reinstall housing without element. Disconnect main fuel line at EMFU outlet port (to fuel nozzle). Attach hose to outlet port and place other end of hose in drain pan. Connect supply hose from preservative oil tank containing preservative oil conforming to MIL-L-6081, grade 1010, to quick disconnect (see 3.3.5.1.2) on main fuel supply line to in-line filter. Turn on preservative oil tank pressure supply pump (5 psi). With “starter only” switch, motor engine and observe fluid from hose attached to EMFU outlet port. Continue motoring engine until preservative oil replaces fuel from EMFU (approximately 2 quarts shall be pumped into drain pan).

CAUTION: Do not motor engine for more than 1 minute. Allow starter to cool down for 2 minutes between motoring intervals.

Remove drain hose. Remove and rinse fuel nozzle thoroughly in a container of dry cleaning solvent conforming to P-D-680. Allow the nozzle to soak in the container for 30 minutes while agitating the nozzle every 5 minutes. Shake the nozzle dry and reinstall. Connect fuel line from EMFU to fuel nozzle. Spray inside of electrical connector with corrosion preventive compound conforming to MIL-C-81309, type III, class 2 and connect to EMFU. Spray outside of connector with corrosion preventive compound conforming to MIL-C-85054, type I. Disconnect preservative oil tank supply hose from in-line filter and reconnect main fuel supply hose at quick-disconnect.

3.3.5.4 Batteries and circuit breakers. Batteries shall be disconnected and all engine related breakers shall be opened.

3.3.5.5 Engine air-intake preservation. The engine air-intake shall be preserved using the following procedure. Remove precleaner and engine air filter "Vee" packs (3 each) from plenum. Using dry cleaning solvent conforming to P-D-680, clean all accessible areas of plenum. Inspect all accessible areas of plenum and reclean if required, using a cloth saturated with solvent conforming to P-D-680. Place "Vee" packs back in plenum but do not lock in place. Slide " packs toward rear of hull so that there is a gap of approximately one half inch between front edge of "Vee" packs and plenum bulkhead. Slide one sheet of barrier material conforming to MIL-B-131, class 3, approximate size 19 x 26 inches, between "Vee" packs and plenum bulkhead. Secure barrier material in place with air cleaner pack clamps. Loosely secure barrier material conforming to MIL-B-131, class 3, approximate size 45 x 29 inches, to the bottom of the precleaner with tape conforming to type II of MIL-T-22085 and reinstall the precleaner on the plenum.

NOTE: Care should be taken during reinstallation of precleaner to avoid tearing or puncturing the barrier material.

Secure barrier material conforming to MIL-B-131, class 3 (approximately 48 by 28 inches) to the top of the precleaner with tape conforming to MIL-T-22085, type II.

3.3.5.6 Engine exhaust preservation. Open exhaust door and cut barrier paper conforming to MIL-B-131, class 3 to approximate size 30 by 38 inches, and secure over exhaust opening with tape conforming to type II of MIL-T-22085. Close and secure exhaust doors.

3.3.5.7 Engine preservation warning tag. After engine has been preserved in accordance with 3.3.5.1 through 3.3.5.6, a red tag conforming to UU-T-81 shall be prepared and imprinted with the following warning:

WARNING

ENGINE PRESERVED. BEFORE MOTORING OR OPERATING ENGINE, ALL TAPE AND BARRIER MATERIAL INSTALLED DURING PRESERVATION MUST BE REMOVED. OIL TANK IS FILLED WITH OPERATIONAL LUBRICANT, HOWEVER, FUEL SYSTEM MUST BE DEPRESERVED. IF ENGINE IS MOTORED OR OPERATED AND IS NOT BEING RETURNED TO SERVICE, PRESERVATION MUST BE REACCOMPLISHED PER 3.3.5.1 THROUGH 3.3.5.6.

Secure red tag to operator's T-bar throttle grip and annotate DD Form 1397 to show date of engine preservation.

3.3.6 Turret ring bearing. Lubrication of turret ring bearing for production processed vehicles shall be in accordance with specified manufacturing requirements. For other than new production vehicles, race ring bearing shall be lubricated in accordance with recommended semiannual maintenance procedures.

3.3.7 Gun tube installed in mount.

3.3.7.1 105MM gun. Immediately after cleaning (see 3.2.5), bore and chamber of the gun shall be coated with preservative oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. Excess preservative shall be allowed to drain from coated surfaces. A strip of VCI treated barrier material conforming to type I, class 3, style G of MIL-P-3420 shall be cut and rolled into a tube with the VCI treated surface on the outside. The barrier material shall be of a size that will provide a continuous cover for the bore and chamber surfaces. The rolled barrier material tube shall be inserted into the gun extending the entire length of bore and chamber. Tube shall not be forced or kinked in a manner that would obstruct chamber. The gun shall remain in battery with turret travel lock secured in lock position. The VCI material shall be applied in accordance with MIL-I-8574.

3.3.7.1.1 Muzzle plug (105MM). A plug shall be provided for the muzzle end of the gun cannon (see figure 1). The muzzle plug shall be completely over-wrapped with aluminum foil conforming to QQ-A-1876, positioned in muzzle end and secured in place with tape conforming to type II of MIL-T-22085. The joint around muzzle plug and gun shall be completely sealed with tape conforming to type II of MIL-T-22085.

3.3.7.2 120MM gun. Immediately after cleaning (see 3.2.5), bore and chamber of the gun shall be coated with preservative oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. Excess preservative shall be allowed to drain from coated surfaces.

CAUTION: Ensure no preservative oil comes in contact with bore evacuator.

A strip of VCI treated barrier material conforming to type I, class 3, style G of MIL-P-3420 shall be cut and rolled into a tube with the VCI treated surface on the outside. The barrier material shall be a size that will provide a continuous cover for the bore and chamber surfaces. The rolled barrier material tube shall be inserted into the gun extending the entire length of the bore and chamber. Tube shall not be forced or kinked in a manner that would obstruct chamber. The gun shall remain in the battery with turret travel lock secured in locked position. The VCI material shall be applied in accordance with MIL-I-8574.

3.3.7.2.1 Muzzle plug (120MM). A plug shall be provided for the muzzle end of the gun cannon (see figure 1). The muzzle plug shall be completely over-wrapped with aluminum foil conforming to QQ-A-1876, positioned in muzzle end and secured in place with tape conforming to type II of MIL-T-22085. The joint around the muzzle plug and gun shall be completely sealed with tape conforming to type II of MIL-T-22085.

3.3.7.3 Muzzle reference collimator. Exposed optical surfaces of the muzzle reference collimator (MRC) shall be cleaned as described in 3.3.9.3. Cushioning material approximately 12 by 24 inches conforming to PPP-C-1752 or PPP-C-1797 shall be applied over the processed collimator housing, and the cushioning material shall be completely over-wrapped and secured to the gun tube with 4 inch wide tape conforming to type II of MIL-T-22085.

WARNING: Internal components of the muzzle reference sight are slightly radioactive. Fragments of this material constitute a health hazard if swallowed, inhaled, or are allowed to enter the bloodstream through an open wound. If a broken sight is encountered, or if one is accidentally broken during preservation processing activities, notify responsible personnel for the disposal of broken parts in accordance with provisions of AR 755-15.

3.3.7.4 Breech mechanism.

3.3.7.4.1 Breech mechanism (105MM gun). All unpainted surfaces, including phosphated surfaces of the breech block, breech operating mechanism and firing mechanism, shall be coated with preservative oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. A plug shall be provided for the breech (see figure 1). Plug shall be completely over-wrapped with aluminum foil conforming to QQ-A-1876. A strip of 2 inch wide tape conforming to type II of

MIL-T-22085 shall be centered on the plug and applied from the top to the bottom. Breech shall be opened and breech plug shall be positioned in the gun chamber. Breech shall be closed.

3.3.7.4.2 Breech mechanism (120MM gun). All unpainted surfaces, including phosphated surfaces of the breech block, breech operating mechanism and firing mechanism, shall be coated with preservative oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. A plug shall be provided for the breech (see figure 1). Plug shall be completely over-wrapped with aluminum foil conforming to QQ-A-1876. A strip of 2 inch wide tape conforming to type II of MIL-T-22085 shall be centered on the plug and applied from the top to the bottom. Breech shall be opened and breech plug shall be positioned in the gun chamber. Breech shall be closed.

3.3.7.5 Exercising of recoil mechanism. Unless otherwise specified (see 6.2), when the recoil mechanism has not been exercised, proof fired, overhauled, or manufactured within 6 months prior to preparation for storage or shipment, or if the 6 month time limit should expire while the vehicle is in transit, the recoil mechanism shall be exercised a minimum of three extensions of the recoil piston. Extension shall be a minimum of 6 inches.

3.3.7.6 Recoil mechanism (after exercising). Inaccessible machined surfaces shall be fogged with preservative oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10. Processing shall be accomplished by removing cover of the gun shield. The surface of the recoil mechanism immediately forward of the breech ring collar shall be coated with grease conforming to MIL-PRF-10924. Application of grease shall be made while gun cannon is out of battery during exercising and upon last extension prior to return to battery.

3.3.7.7 Replenisher. Replenisher shall be filled to operating level with hydraulic fluid conforming to MIL-H-46170.

WARNING: Fire resistant synthetic hydrocarbon (FRSH) hydraulic fluid may contain tricresyl phosphate in accordance with MIL-H-46170 which if taken internally can produce paralysis. Hydraulic fluid may be absorbed through the skin. Wear long sleeves, gloves, goggles, and faceshield. If FRSH gets in eyes, wash them immediately and get medical aid immediately. If FRSH gets on skin, thoroughly wash with soap and water. Wash hands thoroughly prior to eating or smoking. Application of these measures is considered an effective control of hazard.

3.3.7.8 Gun mount. The exposed unpainted surfaces of elevating cylinder, trunnions, trunnion caps, and bearings shall be coated with grease conforming to MIL-PRF-10924.

3.3.7.9 Gun and turret travel locks. The gun travel lock located on the turret ceiling shall be secured to the gun breech to anchor the gun tube in zero elevation during vehicle transit. With the gun tube centered over the vehicle rear deck, the internal turret lock shall be engaged in the locked position to prevent turret rotation.

3.3.8 Gun tube removed from mount.

3.3.8.1 Gun tube removed from mount (105MM gun). Unless otherwise specified by the contracting officer (see 6.2), the gun tube of the tank to be shipped overseas shall be removed from turret (see 6.4) and stowed on top of the vehicle turret in accordance with figures 2 through 18. Extreme care shall be exercised to prevent damage to threaded portion of gun tube during the following operations.

3.3.8.2 Gun tube removed from mount (120MM gun). Unless otherwise specified by the contracting officer (see 6.2), the gun tube of the tank to be shipped overseas shall be removed from turret (see 6.5) and stowed on top of the vehicle turret in accordance with figures 19 through 35. Extreme care shall be exercised to prevent damage to threaded portion of gun tube during the following operations.

3.3.8.3 Gun tube.

3.3.8.3.1 Gun tube (105MM gun). Gun tube shall be processed in accordance with 3.2.5, 3.3.7, and as specified herein. Bare metal surfaces of breech end of tube, including threaded area, shall be wrapped with treated barrier material conforming to type I, class 1, style C of MIL-P-3420. The VCI material shall be applied in accordance with MIL-I-8574. Treated side of barrier shall be applied against the bare metal surface and shall provide a continuous cover starting from 2 inches on the painted surface and extending to approximately 6 inches beyond breech end of tube. Barrier material shall overlap approximately 3 inches over entire length and shall completely cover breech plug when folded toward tube center. Barrier material shall be secured in place with tape conforming to type II of MIL-T-22085. Tape and barrier shall then be oversprayed with coating compound conforming to type II, class 1 of MIL-C-16555. Coating shall be a minimum thickness of 0.040 inch when measured after 4 hours drying (see 4.5.2.5). Specified thickness shall be applied over the entire covered area and shall extend not less than 2 inches onto the painted surface of the tube. Threaded portion of the tube and area of the tube recoil surface which will contact the turret mount shall be protected by application of two layers of barrier material conforming to type 2, grade A of MIL-B-121. Barrier over the threaded portion of the tube shall be secured in place with tape conforming to type II of MIL-T-22085. Removed gun tube locking pin and set screw shall be coated with oil conforming to

MIL-PRF-3150 or MIL-L-21260, type I, grade 10, wrapped in barrier material conforming to type II, grade A, class 2 of MIL-B-121 and placed in a 4 by 8 inch heavy duty, waterproof, transparent bag. The bag shall be identified as to contents, heat sealed, and secured in oddment tray with tape conforming to type II of MIL-T-22085.

3.3.8.3.2 Gun tube (120MM gun). Gun tube shall be processed in accordance with 3.2.5, 3.3.7, and as specified herein. Bare metal surfaces of breech end of tube, including threaded area, shall be wrapped with treated barrier material conforming to type I, class 1, style C of MIL-P-3420. The VCI material shall be applied in accordance with MIL-I-8574. Treated side of barrier shall be applied against the bare metal surface and shall provide a continuous cover starting from 2 inches on the painted surface and extending to approximately 6 inches beyond breech end of tube. Barrier material shall overlap approximately 3 inches over entire length and shall completely cover breech plug when folded toward tube center. Barrier material shall be secured in place with tape conforming to type II of MIL-T-22085. Tape and barrier shall then be oversprayed with coating compound conforming to type II, class 1 of MIL-C-16555. Coating shall be a minimum thickness of 0.040 inch when measured after 4 hours drying (see 4.5.2.5). Specified thickness shall be applied over the entire covered area and shall extend not less than 2 inches onto the painted surface of the tube. Threaded portion of the tube and area of the tube recoil surface which will contact the turret mount shall be protected by application of two layers of barrier material conforming to type I, grade C of MIL-B-121. Barrier over the threaded portion of the tube shall be secured in place with tape conforming to type II of MIL-T-22085. Removed gun tube locking pin, locking screw, and key shall be coated with oil conforming to MIL-PRF-3150 or MIL-L-21260, type I, grade 10, wrapped in greaseproof wrap conforming to type II, grade A, class 2 of MIL-B-121 and heat-sealed in a 8 by 8 inch heavy duty, waterproof, transparent bag. The bag shall be identified as to contents and secured in oddment tray with tape conforming to type II of MIL-T-22085.

3.3.8.4 Gun mount after removal of gun tube.

3.3.8.4.1 Gun mount (105MM). The gun mount shall be placed in full elevation. All bare metal surfaces exposed by removal of the gun tube shall be cleaned with P-D-680 and wiped dry. The above surfaces shall then be coated with grease conforming to MIL-PRF-10924. Opening in the gun shield shall be sealed with barrier material conforming to type I, grade C of MIL-B-121. A plug conforming to figure 14 shall be inserted into opening of the manlet cover and secured in position using tape conforming to MIL-T-22085 in accordance with figure 15.

3.3.8.4.2 Gun mount (120MM). The gun mount shall be placed in full elevation. All bare metal surfaces exposed by removal of the gun tube shall be cleaned with P-D-680 and wiped dry. The above surfaces shall then be coated with grease conforming to MIL-PRF-10924. Opening in the gun shield shall be sealed with barrier material conforming to type I, grade C of MIL-B-121.

A plug conforming to figure 31 shall be inserted into opening of the manlet cover and secured in position using tape conforming to type II of MIL-T-22085 in accordance with figure 32.

3.3.8.5 Breech mechanism after removal of gun tube. The breech mechanism shall be processed in accordance with 3.3.7.4.1 for the 105MM gun and 3.3.7.4.2 for the 120MM gun.

3.3.8.6 Reinstallation of gun tube in mount. Prior to reinstallation of gun tube, bare metal surfaces of gun tube and mount shall be cleaned with P-D-680 and wiped dry. The surfaces shall be lightly lubricated with MIL-PRF-10924 grease. The gun tube shall then be reinstalled (see 6.4 for 105MM gun and 6.5 for 120MM gun).

3.3.9 Fire control, periscopes, and optical items. Exposed optical glass surfaces shall be cleaned by blowing air on the surfaces with a hand syringe or by brushing the surfaces with a clean camel's hair brush followed by the use of ethyl alcohol conforming to O-E-760. The surfaces to be cleaned are located as follows:

A. Interior surfaces.
   1. Gunner's primary sight extension.
   2. Gunner's primary sight.
   3. Commanders weapon sight (not applicable to M1A2).
   4. Gunner's auxiliary sight.
   5. Commanders vision blocks.
   6. Loader's periscope.
   7. Driver's periscope.

B. Exterior surfaces.
   1. Commanders vision blocks.
   2. Commanders weapon sight window (not applicable to M1A2).
   3. Driver's center and side periscopes.
   4. Loader's periscope.
   5. Gunner's primary sight.
   6. Muzzle reference collimator.
   7. Commanders independent thermal viewer window (M1A2 only).

If surface contamination cannot be removed by using ethyl alcohol, cleaning shall be accomplished by use of a solution consisting of 2 ounces detergent conforming to MIL-D-16791, mixed with 0.5 gallon ethyl alcohol conforming to O-E-760, and 1 gallon of distilled water. Using a swab made of lens tissue conforming to A-A-50177, the optical glass surfaces shall be washed with the cleaning agent described above. Washing shall be repeated using a clean swab each time until the surfaces are free of dirt, grime, or foreign materials. Cleaning shall be accomplished with a minimum of pressure and rubbing, without the use of cloth or rubbing materials, to prevent

damage to lens coatings. Immediately after cleaning, the interior optics shall be covered or wrapped with lens tissue conforming to A-A-50177 and secured with tape conforming to type II of MIL-T-22085. The exterior optics, with the exception of the M1A2 commanders independent thermal viewer (CITV), shall be covered or wrapped with lens tissue conforming to A-A-50177, cushioned with chipboard conforming to A-A-1507, and secured with tape conforming to type II of MIL-T-22085. Surfaces to which tape is applied shall be clean and dry to assure effective tape adhesion. Gunner's primary sight exterior ballistics doors shall be closed and locked from the inside. The CITV shall have the ballistic shield in the closed position (this is applicable only to the M1A2). The coaxial machine gun and gunner's telescope openings shall be closed and plugged in accordance with figures 36 through 38 (figure 37 used only on M1). Plugs shall be provided for commanders weapon station in accordance with figures 39 through 41 (figures 39 through 41 are not used on the M1A2). Purging shall be in accordance with 3.3.9.2 and 3.3.9.3.

WARNING: The antireflective coating on the outside right window of the gunner's thermal sight head is slightly radioactive. Fragments of this material constitute a health if swallowed, inhaled, or are allowed to enter the bloodstream through an open wound. If a broken window is encountered, or if one is accidentally broken during processing activities, notify responsible personnel for disposal of broken parts in accordance with provisions of AR 755-15.

3.3.9.1 Radioactive substance warning tag. A red tag conforming to UU-T-81 shall be attached to the gunner's thermal sight, imprinted with the following message:

WARNING

The antireflective coating on the outside right window of the gunner's thermal sight head, and the internal components of the muzzle reference sight, are slightly radioactive. Fragments of these coatings and components constitute a health hazard if swallowed, inhaled, or are allowed to enter the bloodstream through an open wound. If broken periscope windows or muzzle reference sight are encountered, or are accidentally broken during vehicle deprocessing activities, notify responsible personnel for disposal of broken parts in accordance with provisions of AR 755-15.

3.3.9.2 Purging of the gunner's primary sight, laser range finder, image control unit, thermal receiver unit, and gunner's primary sight extension. Fire control items on hand for more than 180 days from the date of receipt at vehicle manufacturer or which disclose internal moisture at time or preparation for shipment and storage shall be purged as follows. Remove dust cover from purge port. Attach dry nitrogen purge kit to purge port and allow nitrogen to flow at 5 to 6 psi through the fire control item for 20 to 30 minutes.

CAUTION: Check to ensure exhaust port is venting.

Disconnect purge kit and replace dust cover. After purging, fire control item shall be processed in accordance with 3.3.9.

3.3.9.3 Purging of muzzle reference collimator (MRC). Collimators which disclose internal moisture (desiccant turned pink) shall be purged as follows: Remove both plugs and the desiccant tube from the MRC. Reattach one plug and the purging adapter to the MRC and allow dry nitrogen to flow at 4 to 6 psi for 4 minutes. Disconnect purge inlet adapter and install new desiccant tube. Reinstall the remaining plug. After purging, process MRC in accordance with 3.3.7.3.

3.3.10 Ballistics computer. Computer Control Panel and Computer Electronic Unit (CEU) covers shall be closed. Test connector dust cap shall be in place. When the main vehicle battery is removed for a period longer than 30 days, the CEU battery pack shall be removed and stored. Aluminum electrolytic capacitors shall be inspected and reformed every 4 years. (The CEU is not used on the M1A2.)

3.3.11 Radio antennae and mounts. If installed, the radio antennae shall be removed from the vehicle, packaged and packed in accordance with 3.4.3. Antenna mounts shall be covered with barrier paper conforming to MIL-B-131, class 1, and the paper secured with tape conforming to type II of MIL-T-22085.

3.3.12 Turret hydraulics. Hydraulic pressure in the turret shall be relieved by opening and closing the turret ammo doors with the engine and auxiliary hydraulic pumps turned off.

3.3.13 Driver's night vision viewer. If installed, the driver's night vision viewer shall be removed from the vehicle. Exposed optical surfaces of the night viewer shall be cleaned in accordance with instructions specified in 3.3.9. Exposed, unpainted, unplated metal surfaces shall be cleaned and coated with grease conforming to MIL-PRF-10924. Preserved parts shall be packaged in accordance with 3.4.4.

3.3.14 Ventilation. The driver's and engine compartment drain valves/ports shall be secured in the open position. Unpainted metallic surfaces shall be coated with preservative compound conforming to MIL-PRF-16173, grade 1. The driver's center and loader's periscopes installed shall be removed (see 3.4.17 for packaging instructions). Screens conforming to figures 42 through 49 shall be constructed and installed in drain valve openings and driver's center and loader's periscope openings as illustrated in figures 42, 43, and 44. A red tag conforming to UU-T-81 shall be prepared and imprinted with the following: "REMOVE SCREENS, VENTILATION BAFFLES, AND CLOSE DRAINS BEFORE OPERATING VEHICLE." The red tag shall be secured in a conspicuous location in the driver's compartment.

3.3.14.1 Turret and hull ammo doors. Turret ammo doors shall be secured open using attached pins. Hull ammo doors shall be blocked open with wood, covered with type II, grade A, class 2 of MIL-B-121 barrier of the appropriate size.

3.3.15 Fire extinguishers. Fire extinguisher cylinders shall be charged within the requirements as stated on the caution decal affixed to the bottle.

3.3.16 Loader's machine gun mount. Loader's machine gun mount shall be removed from the vehicle. Exposed, unpainted, unplated metal surfaces shall be cleaned and coated with grease conforming to MIL-PRF-10924. Machine gun mount shall be packaged in accordance with 3.4.9.

3.3.17 Driver's periscope washer reservoir. Washer reservoir shall be removed and emptied. Foot pump shall be operated until supply line is empty. Reservoir shall be reinstalled in vehicle.

3.3.18 Commanders weapon cradle assembly. The commanders weapon cradle assembly shall be removed from the "A" frame at bracket assembly 12549035. Exposed, unpainted, unplated metal surfaces shall be cleaned and coated with grease conforming to MIL-PRF-10924. (This is applicable only to the M1A2.)

3.3.19 Hatches. Rubber seals around hatches and the four ballistic covers for the fuel filler caps shall be coated with powdered talc conforming to MIL-T-50036. During shipment, hatches shall be closed and locked from the inside, except loader's hatch. The loader's hatch shall be closed and secured from the outside with a bolt having a nut drawn up tight and tack welded to the bolt, or with nut drawn up tight and the bolt peened over or with an approved Government padlock.

3.3.20 Hull/Turret Electronics Unit (H/TEU). The test connector dust cap shall be in place. When the vehicle is to be stored for a period longer than 30 days without running the engine, the H/TEU battery shall be removed and stored. (This is applicable only to the M1A2.)

3.4 Packaging.

3.4.1 Dry charged batteries and cables. Dry charged batteries shall be installed in the vehicle battery carrier. Filler cap openings shall be sealed by placing a 2 inch wide by 3 mil thick strip of film conforming to type II of MIL-F-22191 over all filler cap openings with caps removed. The film shall be of sufficient length to allow the film to be depressed into the filler cap opening to the same depth as the filler cap. Filler caps shall be screwed into the filler openings to form a complete seal without damaging plastic film. Battery cables shall be secured to battery carrier with 0.75 inch wide tape conforming to type IV of ASTM D5330.

3.4.2 Electrolyte. Electrolyte shall be packaged, packed, and marked as specified for one gallon (or smaller as applicable) containers as specified for sulfuric acid conforming to class 2, 3, or 4 of O-S-801, except that the exterior containers shall conform to PPP-B-601 or PPP-B-621. The packed electrolyte shall be stowed with the basic issue items (BII) and shall be secured independently to permit separate removal.

3.4.3 Radio antennae. Radio antennae shall be packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to content, and shall be securely stowed within the vehicle.

3.4.4 Driver's night vision viewer. The driver's night vision viewer shall be packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to content, and shall be securely stowed within the vehicle.

3.4.5 Fire extinguishers. Exterior fire extinguisher handle shall be completely sealed with tape conforming to type II of MIL-T-22085. A red warning tag conforming to UU-T-81 containing the following information shall be located in a conspicuous location within the driver's compartment: "EXTERIOR FIRE EXTINGUISHER HANDLE SEALED WITH TAPE - REMOVE TAPE BEFORE STARTING ENGINE OR PLACING VEHICLE IN SERVICE."

3.4.6 Tow hooks. Tow hooks and related hardware shall be removed for shipment and packaged in a type CF, class WR box conforming to ASTM D5118. Box shall be closed in accordance with ASTM D1974 using tape conforming to type II of MIL-T-22085, shall be identified as to contents, and shall be securely stowed within the vehicle.

3.4.7 Commanders weapon cradle assembly. Immediately after preservation (see 3.3.18) the commanders weapon cradle assembly shall be packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to contents, and shall be securely stowed within the vehicle. (This is applicable only to the M1A2.)

3.4.8 Grenade launcher cables. Right and left grenade launcher cables shall be secured to their respective mounting brackets with tape conforming to type II of MIL-T-22085.

3.4.9 Loader's machine gun mount. Immediately after preservation (see 3.3.16), the loader's machine gun mount shall be packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to contents, and shall be securely stowed within the vehicle.

3.4.10 Accessory assemblies, M240 machine guns. Accessory assemblies 12273961 and 12274063 shall be packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to contents, and shall be securely stowed within the vehicle.

3.4.11 Headlamp assemblies. The two headlamp assemblies 12287287 shall be removed for shipment and packaged in accordance with level A requirements of MIL-STD-2073-1, shall be identified as to contents, and shall be securely stowed within the vehicle.

3.4.12 Cargo straps and fender boxes. Fabric retaining straps on exterior cargo racks shall be removed, shall be identified with the Army part numbers, shall be packaged in a heavy duty, waterproof, transparent bag, and shall be securely stowed within the vehicle. Cargo rack and fender box covers shall be closed and the handles latched and secured with suitable gage wire.

3.4.13 Basic issue items (BII). The BII shall be packaged, packed, and stowed in accordance with ATPD 2241 or other documents designated by the responsible agency. Sensitive cargo, such as machine guns, shall be stowed and shipped as specified in 3.6. The BII rails shall be assembled in accordance with figures 50 through 61. One hook (12275001), one 0.375 inch cap screw, and three 0.5 inch cap screws (see figure 62) shall be removed. Each part number set shall be wrapped separately in wrapping material conforming to type II, class 1 of MIL-P-17667 and parts shall be placed in a heavy duty, waterproof, transparent bag. The bag shall be placed in a box conforming to ASTM D5118. Box shall be closed in accordance with ASTM D1974, identified, and stowed securely within the vehicle. The BII rails shall be installed as indicated on figure 62 using the hardware specified. Tags or stencils that contain the following instructions shall be applied to all boxes containing BII: "WHEN VEHICLES ARE PLACED IN OUTSIDE STORAGE, REMOVE BII BOXES, IDENTIFY WITH VEHICLE SERIAL NUMBER, AND STORE INSIDE OF BUILDING."

3.4.14 Radio cables. Cables shall be routed out under front edge of radio mounting bracket. Cables shall be coiled and secured on top of radio mounting bracket with tape conforming to type II of MIL-T-22085. Antenna cable shall not be routed under mounting bracket. Antenna cable shall be routed along left side of radio mounting bracket and secured with tape conforming to type II of MIL-T-22085.

3.4.15 Loader's seat. The loader's seat back shall be folded down on the seat bottom.

3.4.16 Gunner's primary sight ballistic doors. Ballistic doors of the gunner's primary sight shall be sealed with tape conforming to type II of MIL-T-22085.

3.4.17 Driver's center and loader's periscopes. Driver's center and loader's periscopes shall be cleaned in accordance with 3.3.9, shall be packed in accordance with the applicable packing requirements for the part removed, shall be identified in accordance with MIL-STD-129, and shall be securely stowed within the vehicle.

3.4.18 Commanders independent thermal viewer. The ballistic shield of the commanders independent thermal viewer shall be sealed with tape conforming to type II of MIL-T-22085. (This is applicable to the M1A2 only.)

3.4.19 Digital Electronics Control Unit (DECU). If the vehicle has a DECU, it shall be removed and shall be packaged in accordance with the level A requirements of AK13311526. The package shall be marked with the following two notes:

"The unit must be stored in a controlled warehouse in temperatures of 50°F or lower."
"Battery pack last charged on date:" (Followed by the date that the battery pack was last charged.)

The battery pack charged date is the latest date found on the DECU battery cover underneath the battery pack serial number and is formatted in year/month/day.

3.5 Vehicle closure.

3.5.1 Closure kit. Unless otherwise specified (see 3.7.7 and 6.2), each processed vehicle shall be provided with a vehicle protective closure . Details of closure kit are provided in figures 63 through 160.

3.5.2 Closure marking. The information "TO PREPARE VEHICLE FOR LOADING: OPEN ZIPPERS, REMOVE STIFFENER RODS NEAR COVER ENDS, UNFASTEN COVER FROM FRAME ENDS, AND ROLL COVER AWAY FROM FRONT AND REAR FRAME BOWS TO EXPOSE VEHICLE LIFTING EYES. AFTER LOADING, RESTORE AND SECURE COVER TO ORIGINAL CONDITION." shall be stenciled on the exterior front and rear of the closure in characters a minimum of 0.75 inches high using white enamel conforming to TT-E-529.

3.5.3 Closure disposition marking. The following information shall be stenciled on the outside, front, and rear of the cover: "REUSABLE CLOSURE (COVER AND FRAMEWORK) - DO NOT DESTROY - WHEN REMOVED AND NO LONGER REQUIRED FOR VEHICLE PROTECTION, DISASSEMBLE, PACKAGE, AND SHIP PER INSTRUCTIONS ON INSIDE OF COVER." The following information shall be stenciled on the inside, front, and rear of the cover:

CLOSURE PACKAGING AND SHIPPING INSTRUCTIONS:

1. DISASSEMBLE FRAMEWORK AND SECURELY BUNDLE LIKE ITEMS.
2. PACKAGE SMALL HARDWARE IN CLOTH BAGS.

3. GROUP LARGEST, HEAVIEST ITEMS ON BOTTOM OF WOOD SHIPPING BOX.
4. PLACE SMALLER PACKAGED ITEMS IN VOIDS BETWEEN LARGER ITEMS.
5. FOLD CLOSURE COVER - PLACE ON TOP OF OTHER PACKED ITEMS.
6. IMMOBILIZE PACKED ITEMS AND SECURE BOX COVER.
7. SHIP TO (address to be furnished by contracting officer (see 6.2)).

All stenciled characters to be a minimum of 0.75 inches high using white enamel conforming to TT-E-529.

3.6 Security.

3.6.1 Security of sensitive cargo. Sensitive cargo shall be stored separately under proper security or shipped by separate mode of transportation under proper security or as directed by the contracting activity.

3.6.2 Skirt security. To prevent theft of classified armor skirt during shipment of the vehicle without an armed guard escort, skirt attaching pins shall be secured by replacing the retaining clip (CAGE 99984, PN 9656) with a Trans-Lock pin (CAGE 71182, PN 9251500-2Q) secured in place. The retaining clips shall be placed in a waterproof bag. The bag shall be closed by tape, staples, or heat sealing. The bag shall be marked with part number and nomenclature and shall be secured in vehicle. Removed skirt attaching pins shall be identified with their Army part numbers, shall be packaged in a heavy duty, waterproof, transparent bag, and shall be stowed inside the vehicle.

3.7 Level B. Vehicles shall be processed in the same manner as specified for level A with the following exceptions.

3.7.1 Transmission and final drives. Transmission and final drives shall contain normal seasonal operational lubricant as specified on lubrication order, filled to operating level. DD Form 1397 shall be annotated to indicate grade of lubricant used (see 3.3.3 and 3.3.4).

3.7.2 Engine preservation. The engine shall be filled to the operating level with normal seasonal operational lubricant as specified on the lubrication order. DD Form 1397 shall be annotated to indicate grade of lubricant used. The inlet and exhaust covers shall be removed. The engine shall be operated for 30 seconds using “STARTER ONLY” switch. Covers on vehicle air inlet and exhaust openings shall be installed (see 3.3.5).

NOTE: If covers are not available, seal intake and exhaust openings with greaseproof barrier material conforming to MIL-B-131, class I, and secure with tape conforming to type II of MIL-T-22085.

3.7.3 Fuel tanks. Unless otherwise specified (see 6.2), vehicles shall be shipped without draining residual fuel from the fuel tanks (see 3.3.5.3.1). Any fuel left in the tanks shall be stabilized with Biobar/Biocide in accordance with MIL-S-53021.

3.7.4 Personnel heater and fuel pump. Unless otherwise specified (see 6.2), personnel heaters and fuel pumps shall be in a ready-to-use condition (see 3.3.5.1.1).

3.7.5 Securing gun tube for shipment.

3.7.5.1 105MM gun tube. Unless otherwise specified (see 6.2), the gun tube shall be secured as follows. For domestic shipment, the gun tube shall remain installed in the turret, shall be processed in accordance with 3.3.7.1, and shall be secured in accordance with figure 161. For overseas shipment, the gun tube shall be removed from the turret and stowed on top of the vehicle turret in accordance with 3.3.8.1.

3.7.5.2 120MM gun tube. Unless otherwise specified (see 6.2), the gun tube shall be secured as follows. For domestic shipment, the gun tube shall remain installed in the turret and shall be processed in accordance with 3.3.7.2. For overseas shipment, the gun tube shall be removed from the turret and stowed on top of the vehicle turret in accordance with 3.3.8.2.

3.7.6 Driver's periscope washer reservoir. Reservoir shall contain 0.25 to 0.50 gallons of water and cleaning compound conforming to and mixed in accordance with O-C-1901.

3.7.7 Vehicle closure. Vehicle closures shall not be provided on vehicles processed for level B shipment and storage.

3.8 Loading.

3.8.1 Loading of flat cars. The main gun tube shall be secured with wire rope conforming to MIL-W-83420 as depicted in figure 161. Loading of vehicles on open top railcars shall be in accordance with applicable requirements of Section 1 of the Association of American Railroads Manual (AAR) and figure 81 of Section 6 of the AAR. The type of railcar and the applicable transportation data shall be as authorized by the responsible Government transportation office. See 3.4.13 for processing of BII boxes.

3.8.2 Reprocessing engine after loading - level A. If engine is operated in connection with movement of vehicle during loading or unloading, engine shall be reprocessed in accordance with 3.3.5.1 through 3.3.5.6.

3.8.3 Reprocessing engine after loading - level B. If engine is operated in connection with movement of vehicle during loading or unloading, engine shall be reprocessed in accordance with 3.7.2.

3.8.4 Brakes and gearshift. Brakes shall not be set and the transmission lever shall be placed in the neutral position on vehicles with the loader's hatch sealed.

3.9 Marking. In addition to any special marking required in the contract or order, vehicle shall be marked in accordance with 3.5.2 and MIL-STD-129.

3.9.1 Lifting points. The legend "LIFT HERE" with arrow pointing to the lifting eye shall be stenciled adjacent to each lifting eye using black enamel conforming to TT-E-527, No. 37038. Stenciling to be 0.75 inches high minimum.

3.9.2 Shipping label adhesion. To assure effective adhesion when applied during cold weather, Military Shipment Labels, DD Form 1387, shall be cemented to vehicles with adhesive conforming to type I of MMM-A-1617. After mounting, labels shall be provided with a protective coating in accordance with the applicable provisions of MIL-STD-129.

3.9.3 Final finish. Final finish of items delineated in the figures of this specification shall be as shown thereon.

3.10 Drive on - drive off capability. When vehicles are to be operated for loading or unloading (see 6.2), the following provisions shall apply.

3.10.1 Fuel tank. Fuel shall be provided to accomplish movement of the vehicle. The fuel shall be stabilized with Biobar/Biocide in accordance MIL-S-53021. The quantity of the fuel shall be at a minimum of 100 gallons and at a maximum of 200 gallons of fuel when delivered. These quantities shall be determined by interpreting the readings of the driver's instrument panel fuel gages as specified in table I.

3.10.2 Batteries and electrolyte. Batteries shall be filled with electrolyte conforming to O-S-801, shall be fully charged at 29 to 32 volts with a specific gravity reading of 1.280 as required by TM 9-6140-200-14, and shall be installed in the vehicle (see 6.6). The negative link shall be disconnected from the battery bus bar and secured to the vehicle terminal bus using tape

conforming to type II of MIL-T-22085. Retighten link mounting screws and close and latch the battery access covers. A tag conforming to UU-T-81 bearing the following message shall be located in a conspicuous location in the driver's compartment:

WARNING

Vehicle preserved for drive away condition. Before starting, connect negative link to negative battery bus bar. Do not slave start or operate vehicle without connecting vehicle batteries. Disconnect negative link during any further shipment or storage of vehicle. Engine and fuel tanks not preserved.

TABLE I. Fuel tank selector levels.

Gage fuel level	Left front, gallon 1/	Right front, gallon 1/	Rear, gallon 1/
1/8	18	25.5	42.5
1/4	31	43.5	72.5
3/8	44	61.5	102.5
1/2	57	79.5	132.5
5/8	70	97.5	162.5
3/4	83	115.5	192.5
7/8	96	133.5	222.5
Full	109	151.5	252.5

1/ Average tolerance has been included to the fuel tank selector levels.

3.10.3 Parking brake. A red tag conforming to UU-T-81 bearing the following message shall be secured in a conspicuous location in the driver's compartment:

WARNING

Vehicle preserved for drive away condition. Before starting and after connecting negative battery link to negative battery bus bar, turn on auxiliary hydraulic pump to ensure braking capability.

3.10.4 Engine. The engine shall be filled to the operating level with normal seasonal operational lubricant as specified in the lubrication order (see 3.3.5). DD Form 1397 shall be annotated to indicate grade of lubricant used. No intake or exhaust covers shall be used.

4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.3).
b. Conformance inspection (see 4.4).

4.2 Inspection conditions. Unless otherwise specified (see 6.2), all inspections shall be conducted under the following conditions:

a. Air temperature: 73 ± 18°F
b. Barometric pressure: 28.5 + 2.0 inches of mercury
- 3.0
c. Relative humidity: 50 ± 30 percent

4.3 First article inspection. One of the first 10 production vehicles processed to each level of protection shall be subjected to first article inspection. Sample vehicles shall be inspected in accordance 4.5 for conformance to the requirements of table II.

4.4 Conformance inspection. Each vehicle shall be inspected in accordance with 4.5.2, 4.5.2.1, 4.5.2.2, 4.5.2.3, and 4.5.2.5 for conformance to the requirements of table II.

4.5 Methods of inspection.

4.5.1 Materials. Except for materials which have been inspected by the Government at source, all materials to be used in processing of vehicles shall be inspected in accordance with the materials specification. When materials are listed on a Qualified Product List, they shall be obtained from one of the approved sources indicated.

4.5.2 Processing. Except as otherwise specified herein, vehicles shall be inspected to determine conformance to this specification. Inspection shall include all items specified in table II and 4.5.2.1 through 4.5.2.5.

4.5.2.1 Cleaning. To determine conformance to 3.2.1, interior of vehicles shall be examined for cleanliness. One vehicle each day shall be tested for cleanliness in accordance with the applicable provisions of MIL-STD-2073-1. To determine conformance to 3.2.4, exterior of vehicle shall be examined for cleanliness. Surfaces to which tape is to be applied shall be examined for cleanliness before application (see 3.3.9).

TABLE II. Processing inspection.

Component or processing activity	Cleaning	Preservation		Packaging/ Stowage
	Levels A & B	Level A	Level B	Levels A & B
Disassembly		3.1.1	3.1.1	3.1.1
Matchmarking				3.1.2
Preservation forms				3.1.3
Cleaning and drying	3.2			
Interior of vehicle	3.2.1			
Battery supports and retainers	3.2.2			
Backrests, seats, headrests, and crash pads	3.2.3			3.4.15
Exterior of vehicle	3.2.4			
Gun	3.2.5			
Fire control, periscopes, and vision blocks	3.2.6			
Crosswind sensor	3.2.7	3.2.7	3.2.7	3.2.7
Preservation		3.3	3.3	
Relubrication		3.3.1	3.3.1	
Battery supports and retainers		3.3.2	3.3.2	
Transmission 1/		3.3.3	3.7.1	
Final drives 1/		3.3.4	3.7.1	
Engine preservation 1/		3.3.5	3.7.2	
Engine fuel and oil system		3.3.5.1		
Personnel heater and fuel pump		3.3.5.1.1	3.7.4	
Oil system		3.3.5.1.2		
Oil tank		3.3.5.2		
Fuel pumps and fuel tanks		3.3.5.3.1	3.7.3	
Electromechanical fuel unit		3.3.5.3.2		
Batteries and circuit breakers		3.3.5.4		
Engine air-intake preservation		3.3.5.5		
Engine exhaust preservation				
Engine preservation warning tag		3.3.5.6		
		3.3.5.7		

TABLE II. Processing inspection - Continued.

Component or processing activity	Cleaning	Preservation		Packaging/ Stowage
	Levels A & B	Level A	Level B	Levels A & B
Turret ring bearing		3.3.6	3.3.6	
Gun tube installed in mount (105 MM gun)		3.3.7.1	3.7.5.1	3.3.7.1
Muzzle plug (105 MM)		3.3.7.1.1	3.3.7.1.1	
Gun tube installed in mount (120 MM gun)		3.3.7.2	3.7.5.2	3.3.7.2
Muzzle plug (120 MM)		3.3.7.2.1	3.3.7.2.1	
Muzzle reference collimator		3.3.7.3	3.3.7.3	
Breech mechanism (105 MM gun)		3.3.7.4.1	3.3.7.4.1	
Breech mechanism (120 MM gun)		3.3.7.4.2	3.3.7.4.2	
Exercising of recoil mechanism		3.3.7.5	3.3.7.5	
Recoil mechanism (after exercising)		3.3.7.6	3.3.7.6	
Replenisher				
Gun mount		3.3.7.7	3.3.7.7	
Gun and turret travel locks		3.3.7.8	3.3.7.8	
Gun tube removed from mount (105 MM gun)		3.3.7.9	3.3.7.9	
Gun tube removed from mount (120 MM gun)		3.3.8.1	3.7.5.1	3.3.8.1
Gun tube (105 MM gun)		3.3.8.2	3.7.5.2	3.3.8.2
Gun tube (120 MM gun)		3.3.8.3.1		3.3.8.3.1
Gun mount after removal of gun tube (105 MM)		3.3.8.3.2		3.3.8.3.2
Gun mount after removal of gun tube (120 MM)		3.3.8.4.1	3.3.8.4.1	
Breech mechanism after removal of gun tube		3.3.8.4.2	3.3.8.4.2	
Reinstallation of gun tube in mount		3.3.8.5	3.3.8.5	
Fire control, periscopes, and optical items	3.3.8.6	3.3.8.6	3.3.8.6	
	3.3.9	3.3.9	3.3.9	3.4.17

TABLE II. Processing inspection - Continued.

Component or processing activity	Cleaning	Preservation		Packaging/ Stowage
	Levels A & B	Level A	Level B	Levels A & B
Radioactive substance warning tag				3.3.9.1
Purging of the gunner's primary sight, laser range finder, image control unit, thermal receiver unit, and gunner's primary sight extension		3.3.9.2	3.3.9.2	
Purging of muzzle reference collimator		3.3.9.3	3.3.9.3	
Ballistics computer		3.3.10	3.3.10	
Radio antennae and mounts		3.3.11	3.3.11	3.4.3
Turret hydraulics		3.3.12	3.3.12	
Driver's night vision viewer	3.3.9	3.3.13	3.3.13	3.4.4
Ventilation		3.3.14	3.3.14	
Turret and hull ammo doors		3.3.14.1	3.3.14.1	
Fire extinguishers				
Loader's machine gun mount		3.3.15	3.3.15	
Driver's periscope washer reservoir		3.3.16	3.3.16	
Commanders weapon cradle assembly		3.3.17	3.7.6	
Hatches		3.3.18	3.3.18	
Hull/Turret electronics unit				
Dry charged batteries and cables		3.3.19 3.3.20	3.3.19 3.3.20	
Electrolyte				3.4.1
Fire extinguishers				
Tow hooks				3.4.2
Commanders weapon cradle assembly				3.4.5 3.4.6
Grenade launcher cables				3.4.7
Loader's machine gun mount				3.4.8 3.4.9

TABLE II. Processing inspection - Continued.

Component or processing activity	Cleaning	Preservation		Packaging/ Stowage
	Levels A & B	Level A	Level B	Levels A & B
Accessory assemblies, M240 machine guns				3.4.10
Headlamp assemblies				3.4.11
Cargo straps and fender boxes				3.4.12
Basic issue items				3.4.13
Radio cables				3.4.14
Gunner's primary sight ballistic doors				3.4.16
Driver's center and loader's periscopes				3.4.17
Commanders independent thermal viewer				3.4.18
Digital Electronics Control Unit (DECU)				3.4.19
Vehicle closure			3.7.7	
Closure kit		3.5.1		
Closure marking		3.5.2		
Closure disposition marking		3.5.3		
Security of sensitive cargo				3.6.1
Skirt security				3.6.2
Loading of flat cars				3.8.1
Reprocessing engine after loading - level A				3.8.2
Reprocessing engine after loading - level B				3.8.3
Brakes and gearshift				3.8.4
Marking				3.9
Lifting points				3.9.1
Shipping label adhesion				3.9.2
Final finish				3.9.3
Drive on - drive off capability				3.10
Fuel tank				3.10.1

TABLE II. Processing inspection - Continued.

Component or processing activity	Cleaning	Preservation		Packaging/ Stowage
	Levels A & B	Level A	Level B	Levels A & B
Batteries and electrolyte				3.10.2
Parking brake				3.10.3
Engine				3.10.4

1/ Inspect DD Form 1397.

4.5.2.2 Fuel tanks. To determine conformance to 3.3.5.3.1, the fuel tank interior shall be visually inspected to verify that specified processing has been accomplished.

4.5.2.3 Gun. Gun shall be examined to determine condition and effectiveness of processing. When reprocessing has been accomplished, it shall be examined for conformance to 3.3.7.1 and 3.3.7.1.1 or 3.3.8.1 and 3.3.8.3.1 for 105MM gun and 3.3.7.2 and 3.3.7.2.1 or 3.3.8.2 and 3.3.8.3.2 for 120MM gun.

4.5.2.4 Engine. The engine shall be examined to determine condition and effectiveness of processing. When reprocessing has been accomplished, the engine shall be examined for conformance to 3.3.5.

4.5.2.5 Coating compound thickness. A minimum of one vehicle per day shall be inspected for thickness of coating compound to determine conformance to 3.3.8.3.1 or 3.3.8.3.2. After 4 hours of drying, four 1 inch square specimens of barrier material shall be cut from areas (flat and contour) selected at random by the Government inspector and measured for specified thickness.

5. PACKAGING

This section is not applicable to this specification.

6. NOTES

(This section contains information of a general or explanatory nature which may be helpful, but is not mandatory.)

6.1 Intended use. This specification covers the processing of the M1 series full-tracked combat tank for storage outside of buildings, for immediate use shipment, and for domestic or overseas shipment, including carloading.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of the specification.
b. Applicable level of processing (see 1.2).
c. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2.1, 2.2.2, and 2.3).
d. If first article is required (see 3.1).
e. If exercising of recoil mechanism should be other than as specified (see 3.3.7.5).
f. If removal of 105MM gun tube should be other than as specified (see 3.3.8.1).
g. If removal of 120MM gun tube should be other than as specified (see 3.3.8.2).
h. If vehicle protective closure is not required (see 3.5.1).
i. Address for return of vehicle closure (see 3.5.3, item 7).
j. If residual fuel should be drained from the fuel tanks (see 3.7.3).
k. If additional fuels should be supplied (see 3.10.1).
l. If vehicle drive-on/drive-off capability is required (see 3.10).
m. If gun tube is to remain installed in gun mount or removed and stowed on top of the vehicle (see 3.3.7, 3.3.8, and 3.7.6).
n. If inspection conditions are other than as specified (see 4.3.1).

6.3 Safety precautions. Caution should be exercised in handling fire extinguisher cylinders. Cylinders should not be dropped, permitted to strike each other, or handled roughly. Extreme care should be exercised during the reinstallation operation to avoid tripping the fire extinguisher control system (see 3.3.15).

6.4 Installation and removal of 105MM gun tube. Installation and removal instructions for the 105MM gun tube are specified in TM 9-2350-255-34.

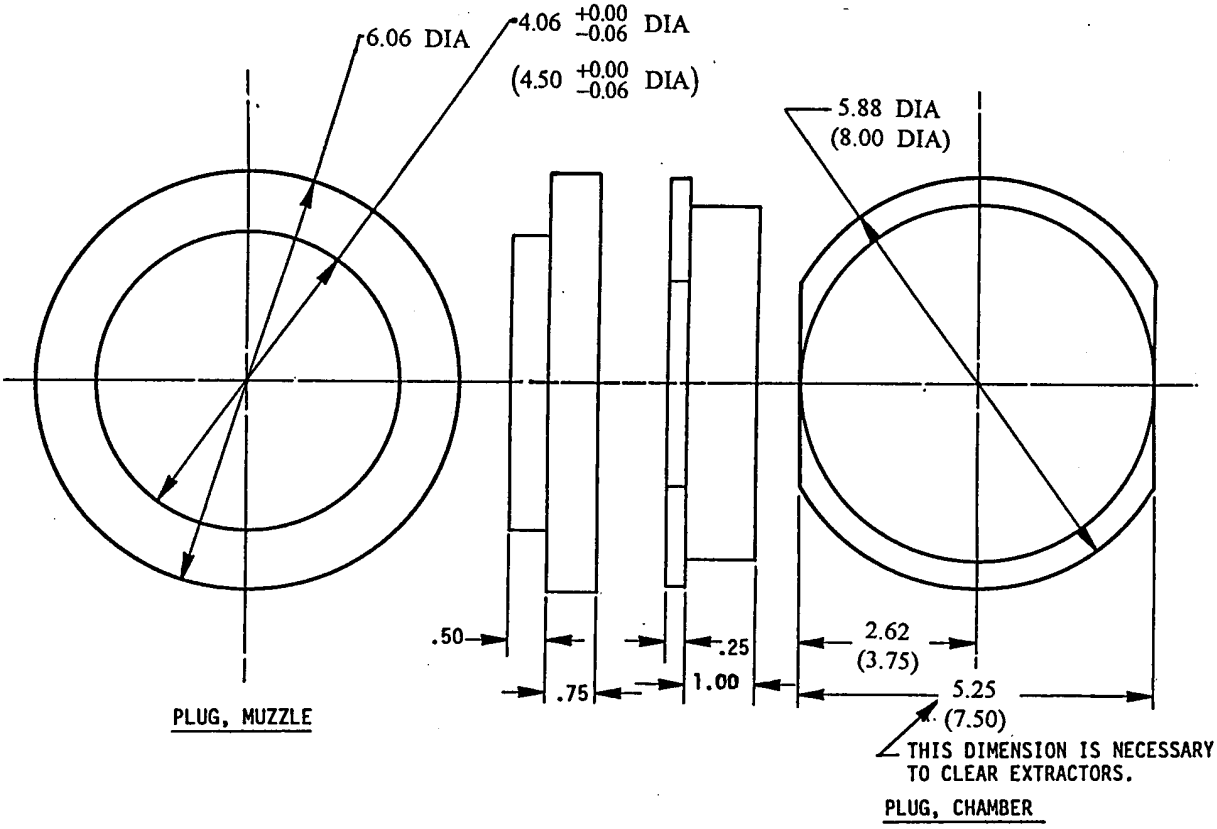
6.5 Installation and removal of 120MM gun tube. Installation and removal instructions for 120MM gun tubes are specified in TM 9-2350-264-34.

6.6 Batteries service. Charging and servicing of lead acid batteries should be in accordance with TM 9-6140-200-14.

6.7 Subject term (key word) listing.

105MM gun tube
120MM gun tube
Carloading
Domestic
Immediate use
Outside
Overseas
Preservation

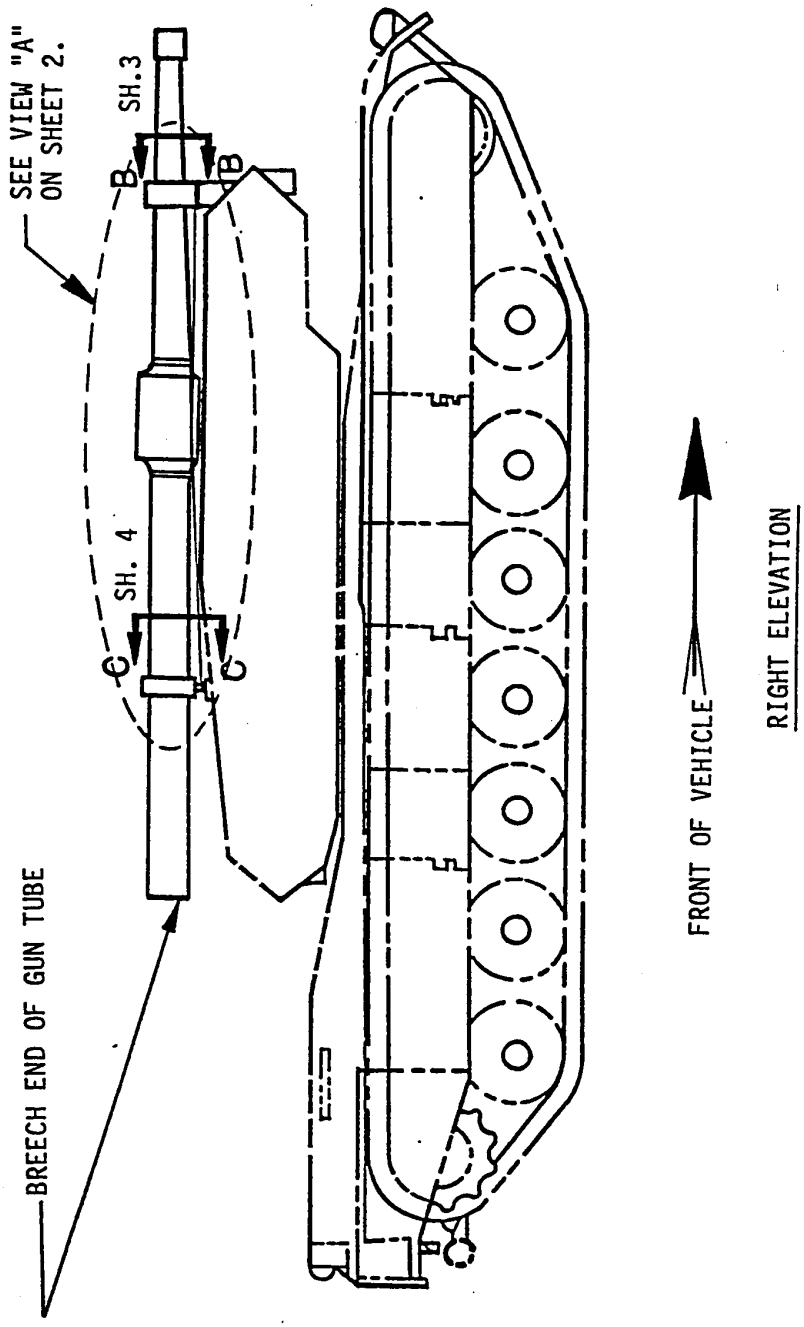
6.8 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.



NOTES:

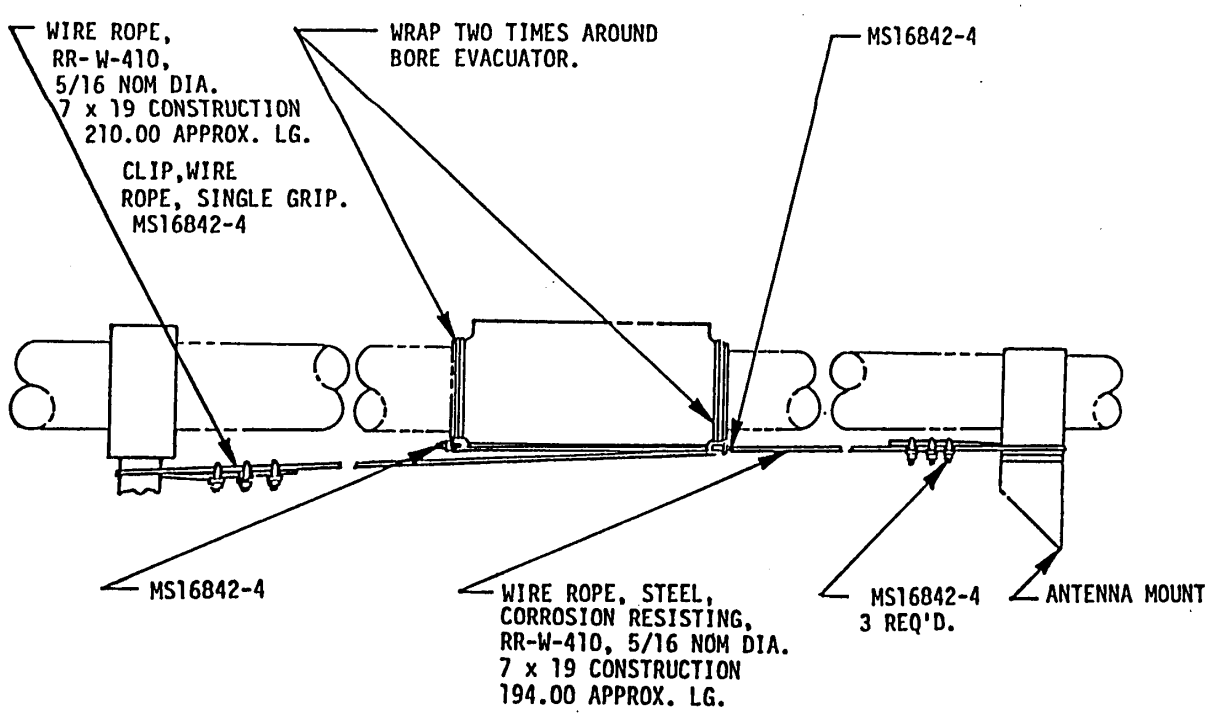
1. Material: Wood.
2. Optional material: Plywood, exterior type, A-A-55057.
3. Final finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.
4. Dimensions in parentheses, ( ), are for the 120MM gun.

FIGURE 1. Plugs, muzzle, and chamber.



SHEET 1 OF 4

FIGURE 2. Installation, shipping 105MM gun tube.



SHEET 2 OF 4

FIGURE 2. Installation, shipping 105MM gun tube - Continued.

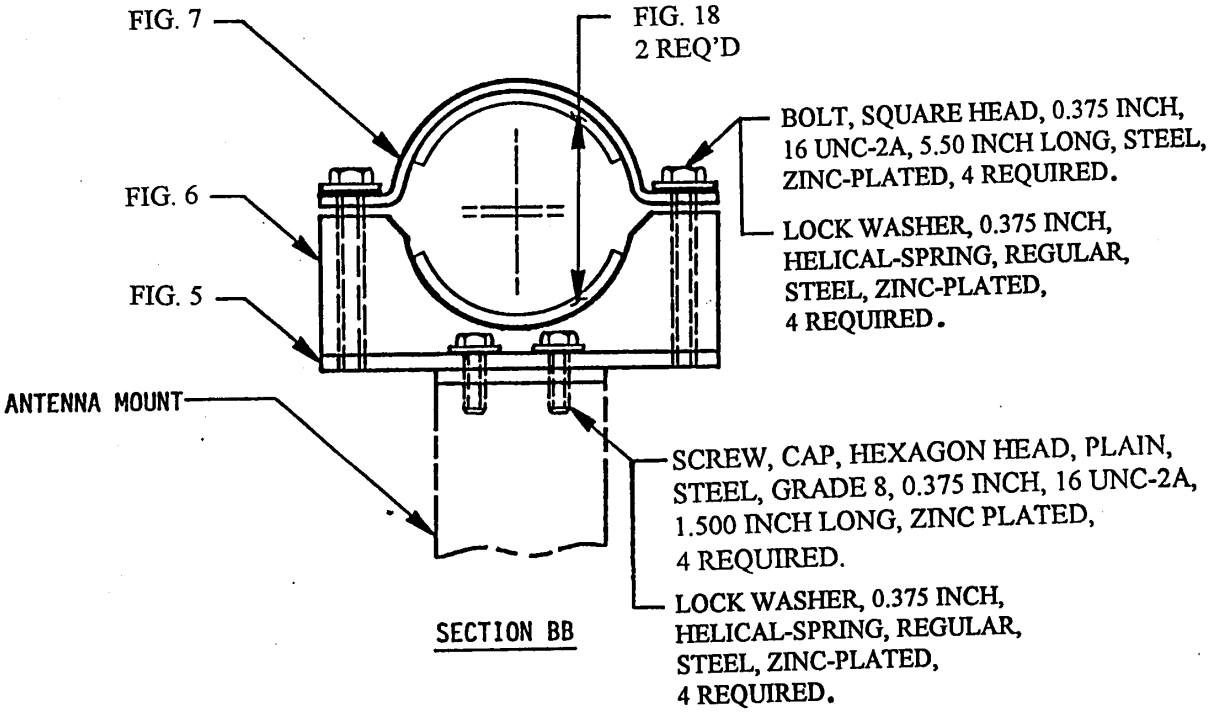
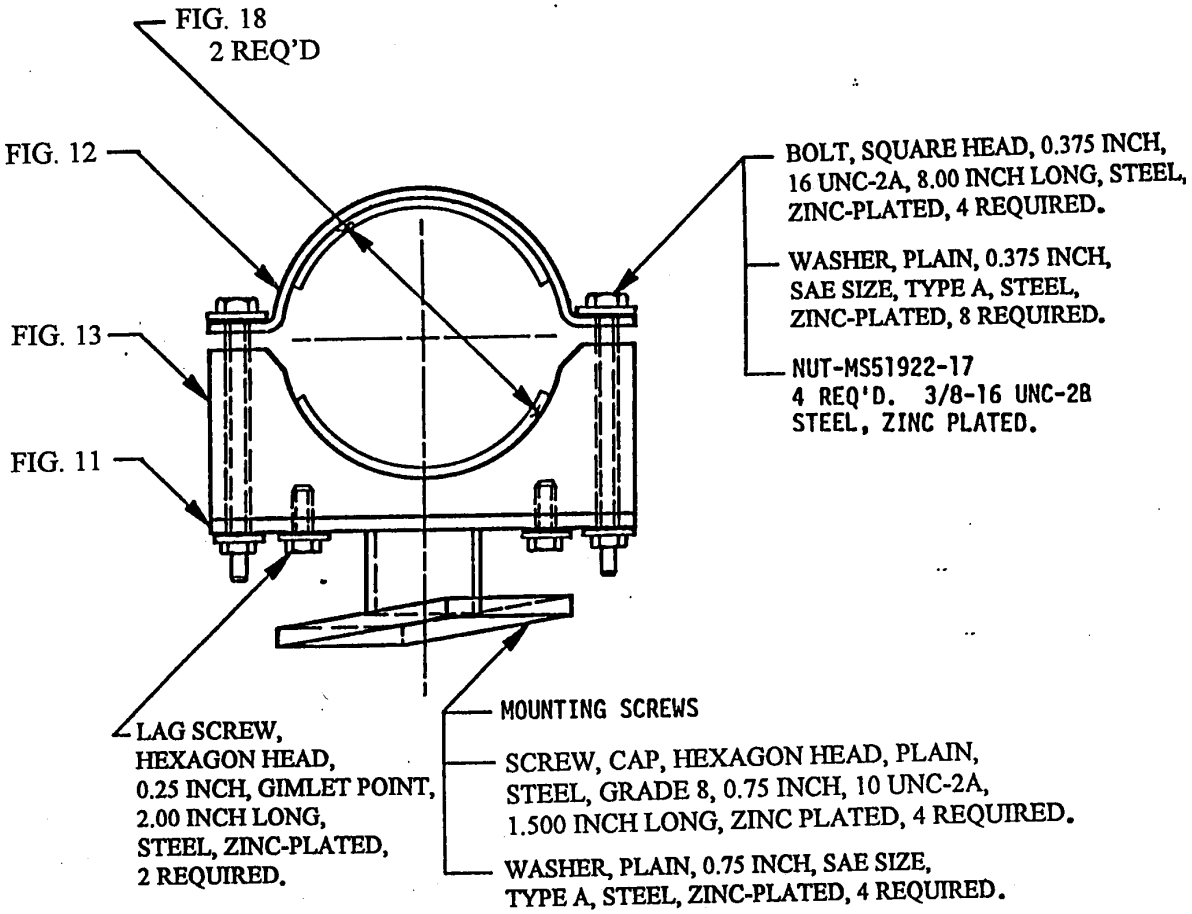
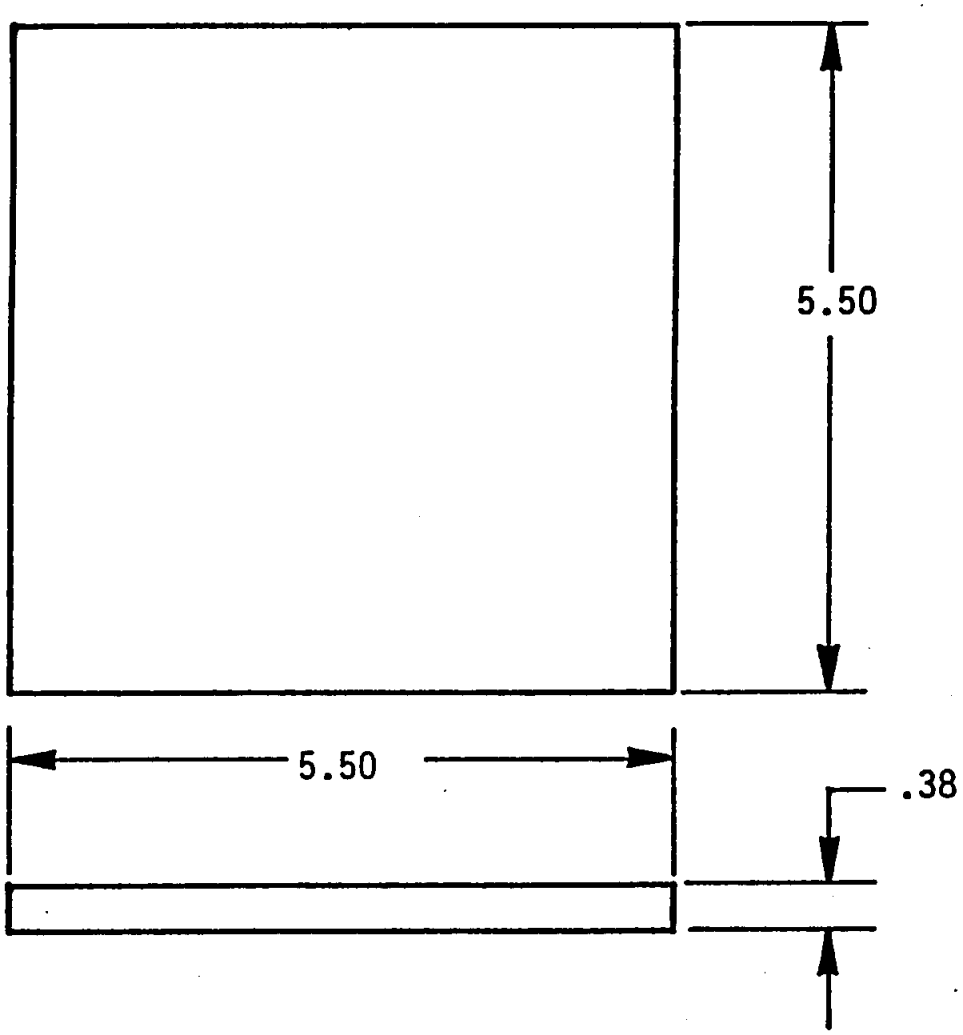


FIGURE 2. Installation, shipping 105MM gun tube - Continued.



SHEET 4 OF 4

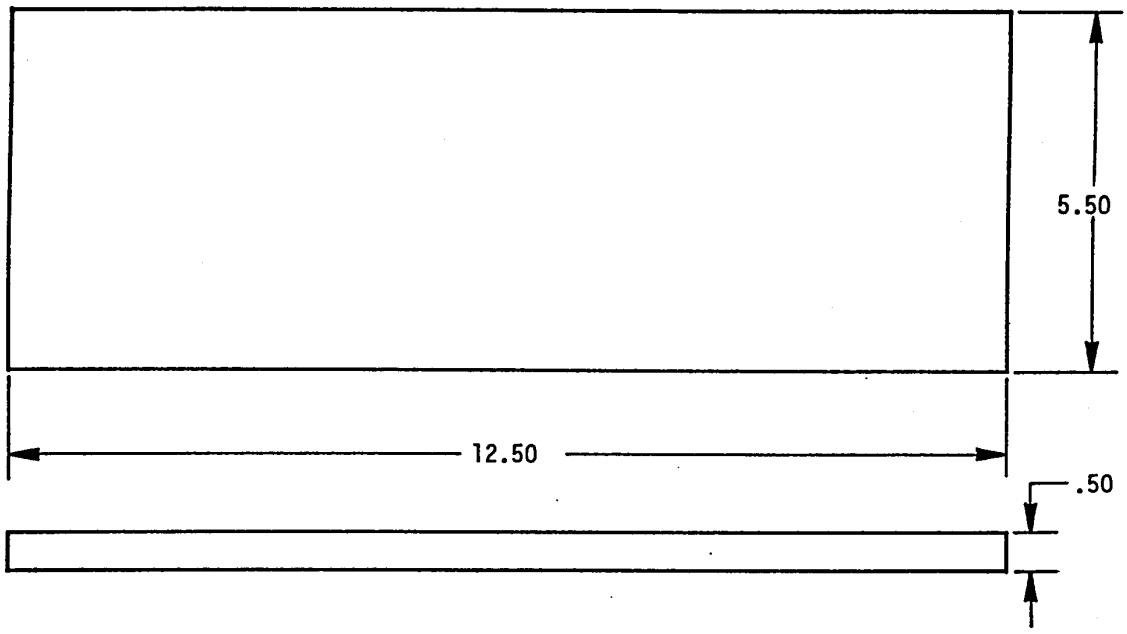
FIGURE 2. Installation, shipping 105MM gun tube - Continued.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.

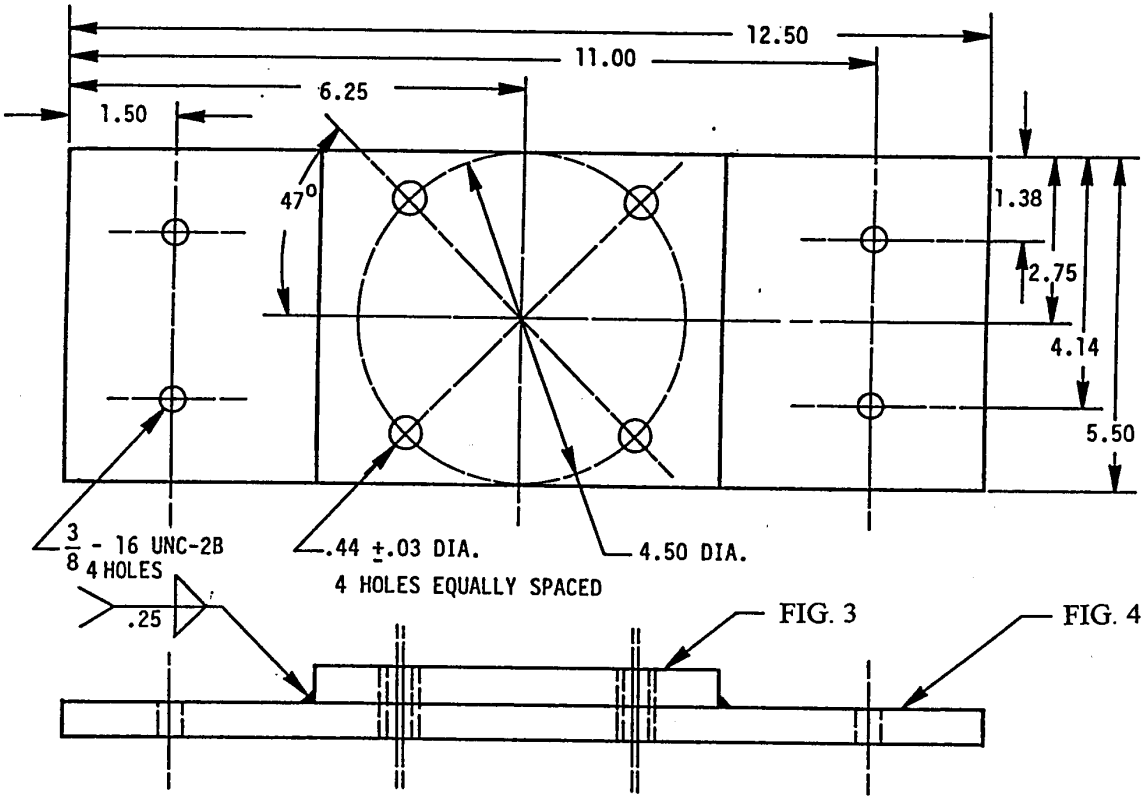
FIGURE 3. Plate.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A576.
2. Remove all burrs and sharp edges.

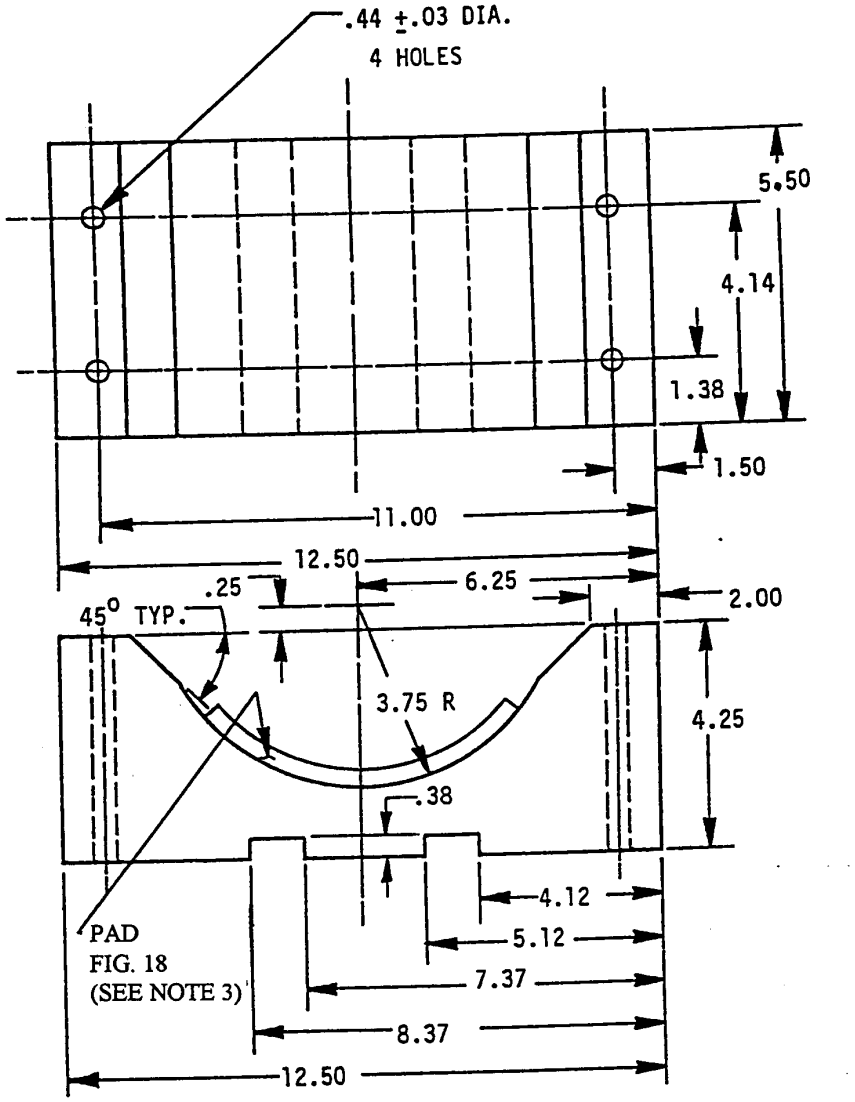
FIGURE 4. Plate.



NOTES:

1. All weld sizes are minimum.
2. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
3. Remove all burrs and sharp edges.

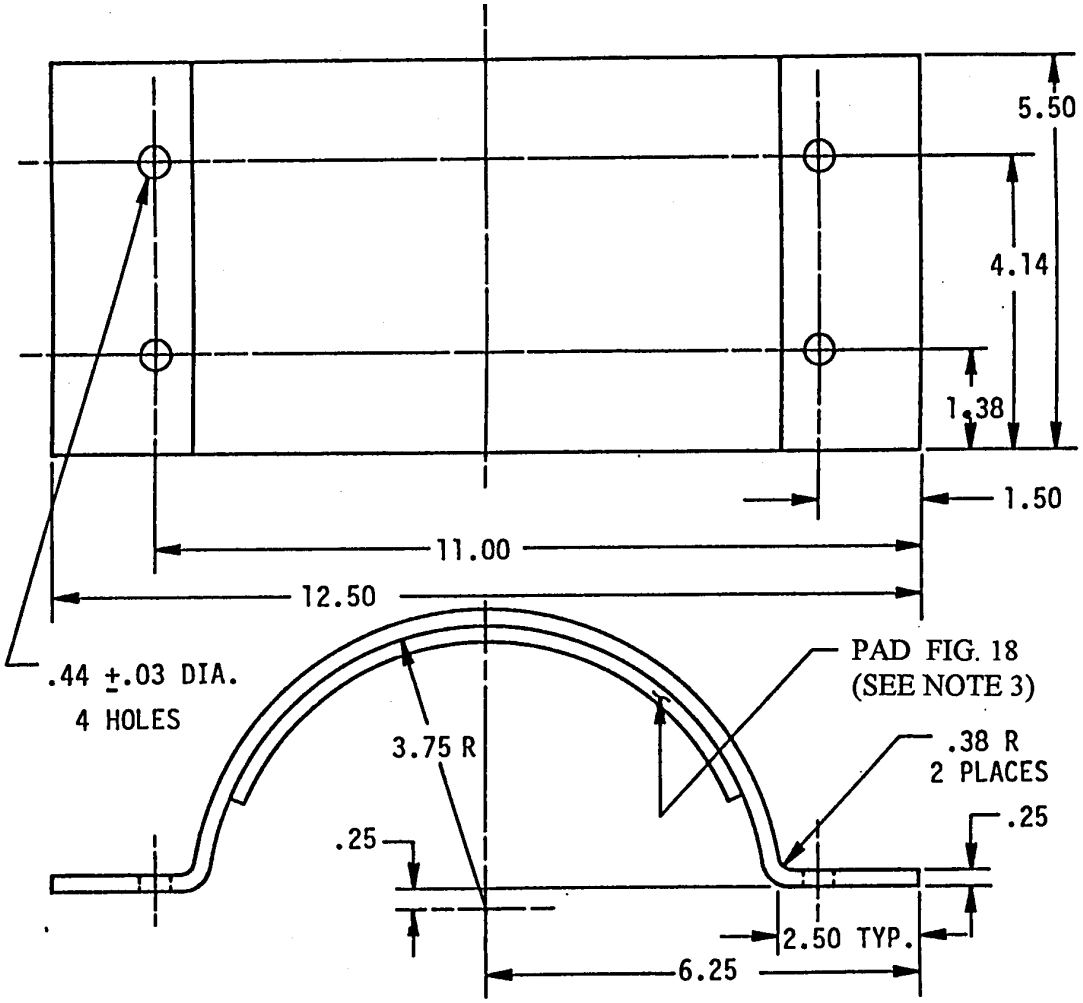
FIGURE 5. Bracket.



NOTES:

1. Material: Wood conforming to A-A-52520.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Paint green 383 per MIL-C-46168 or MIL-C-53039, 1.8 to 2.2 mils thick dry coat.

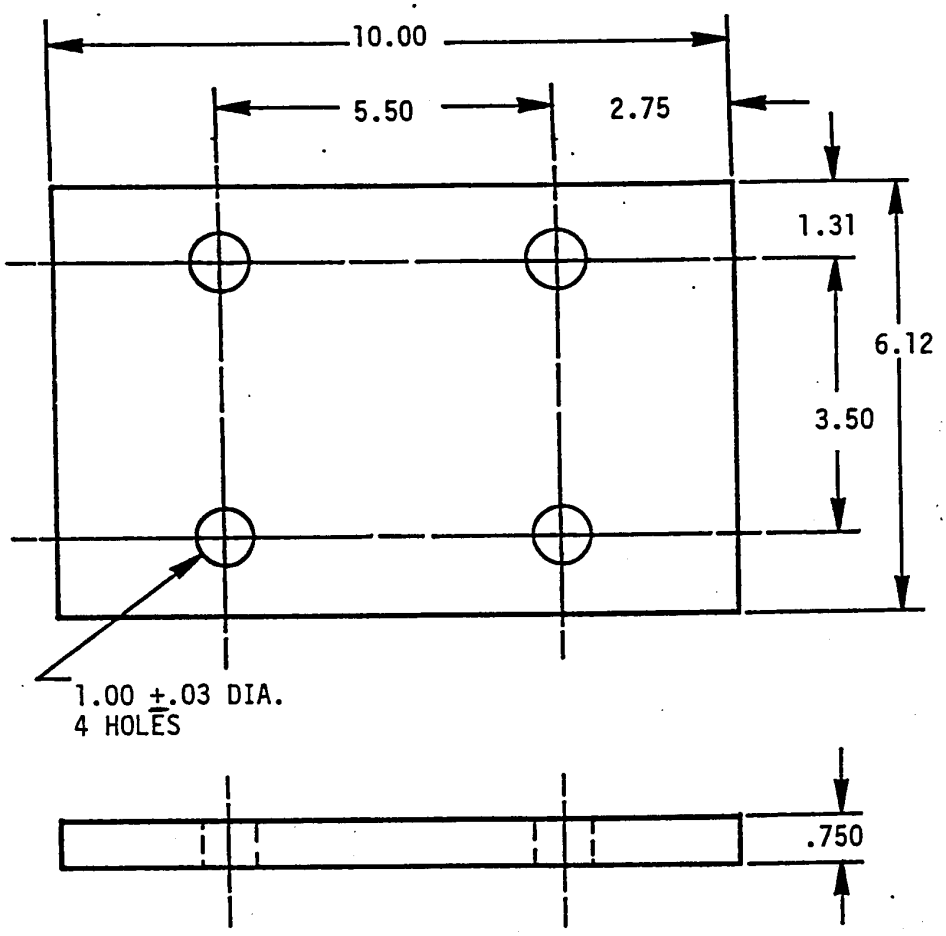
FIGURE 6. Block, rear.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

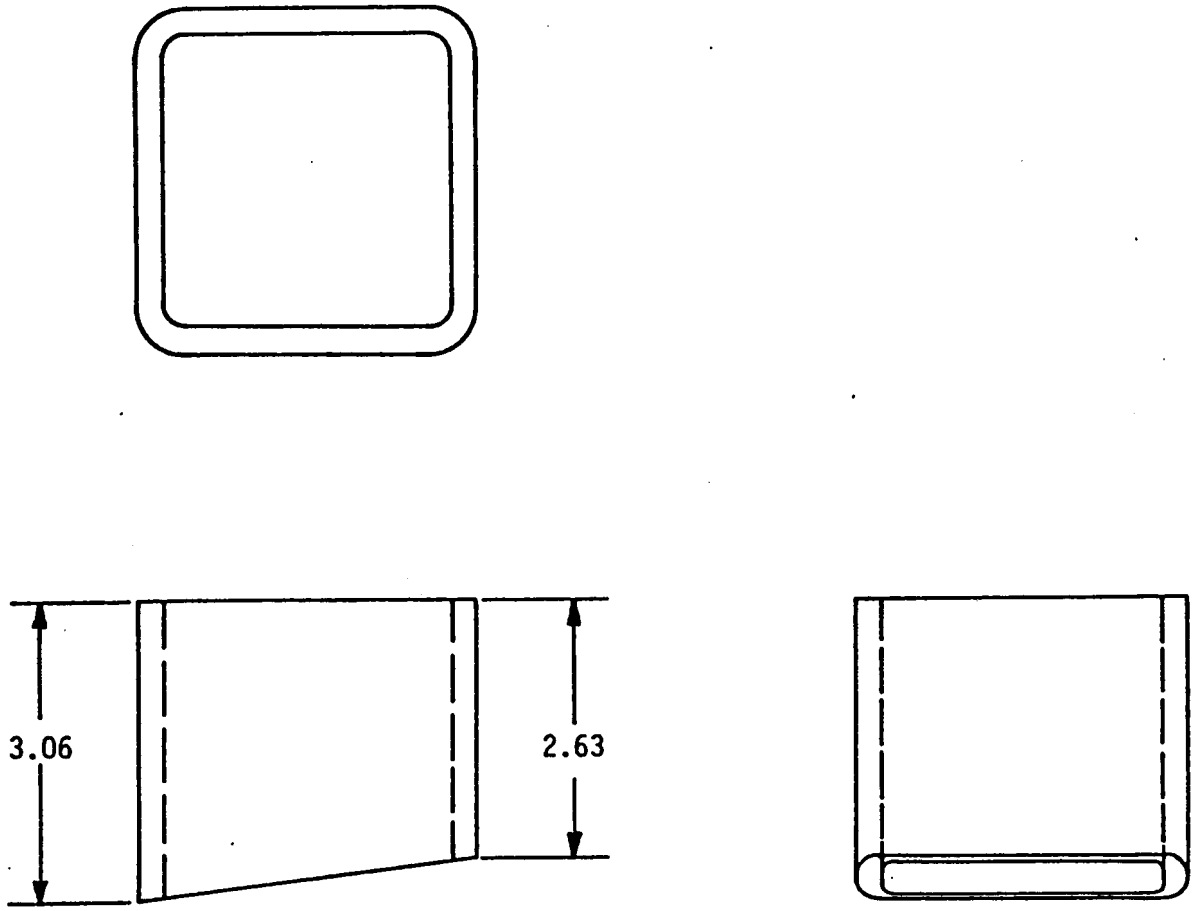
FIGURE 7. Bracket.



NOTES:

1. Material: Steel, UNS 1010 or 1020, ASTM A576 or ASTM A36.
2. Remove all burrs and sharp edges.

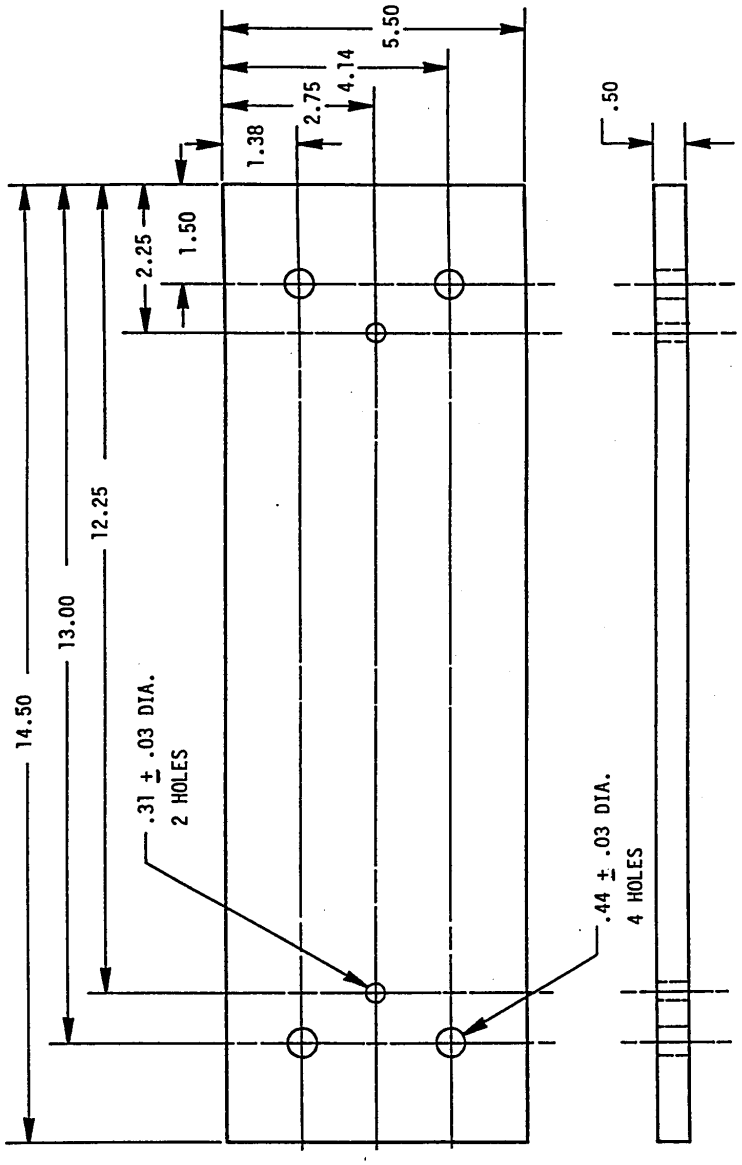
FIGURE 8. Plate.



NOTES:

1. Material: Steel, tube, ASTM A500 or ASTM A501, grade 8, 3.50 inch square x 0.25 inch wall.
2. Remove all burrs and sharp edges.

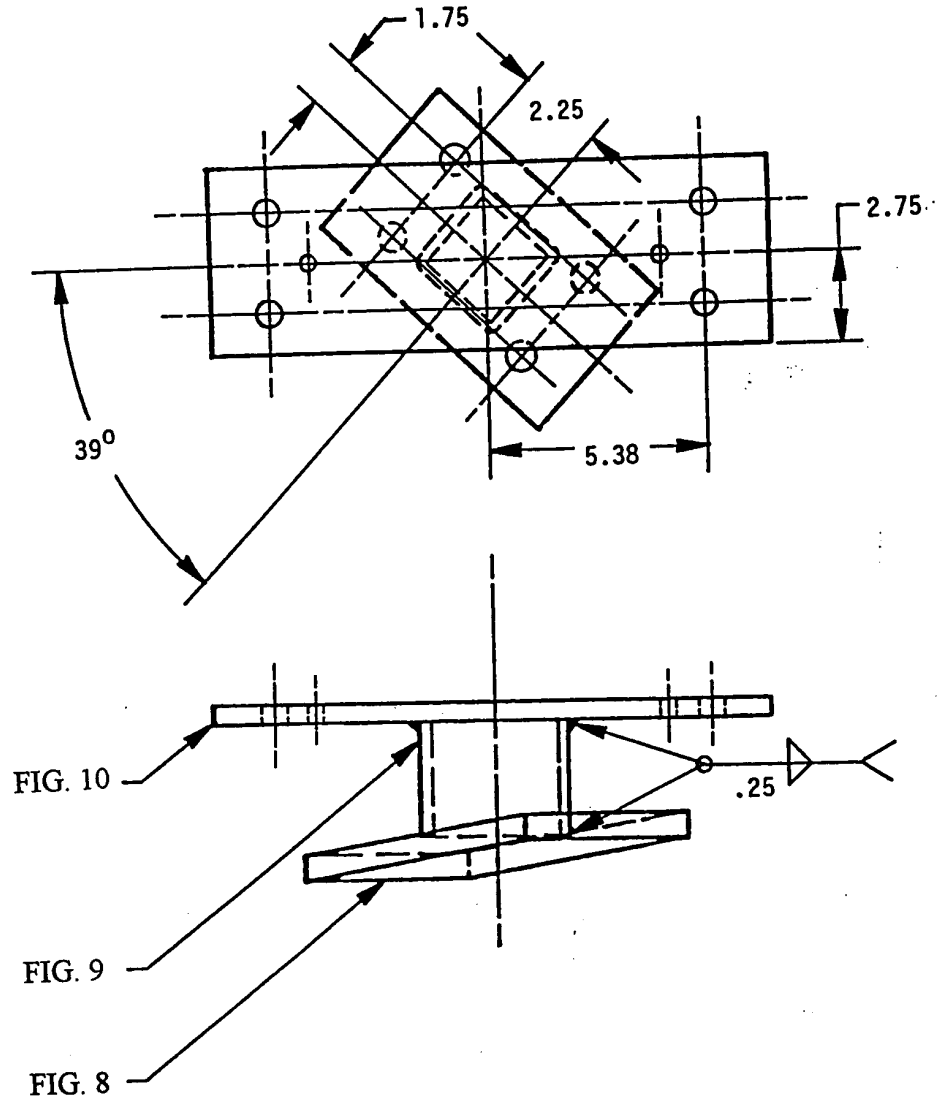
FIGURE 9. Steel tubing.



NOTES:

1. Material: Steel, UNS 1010 to 1020, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.

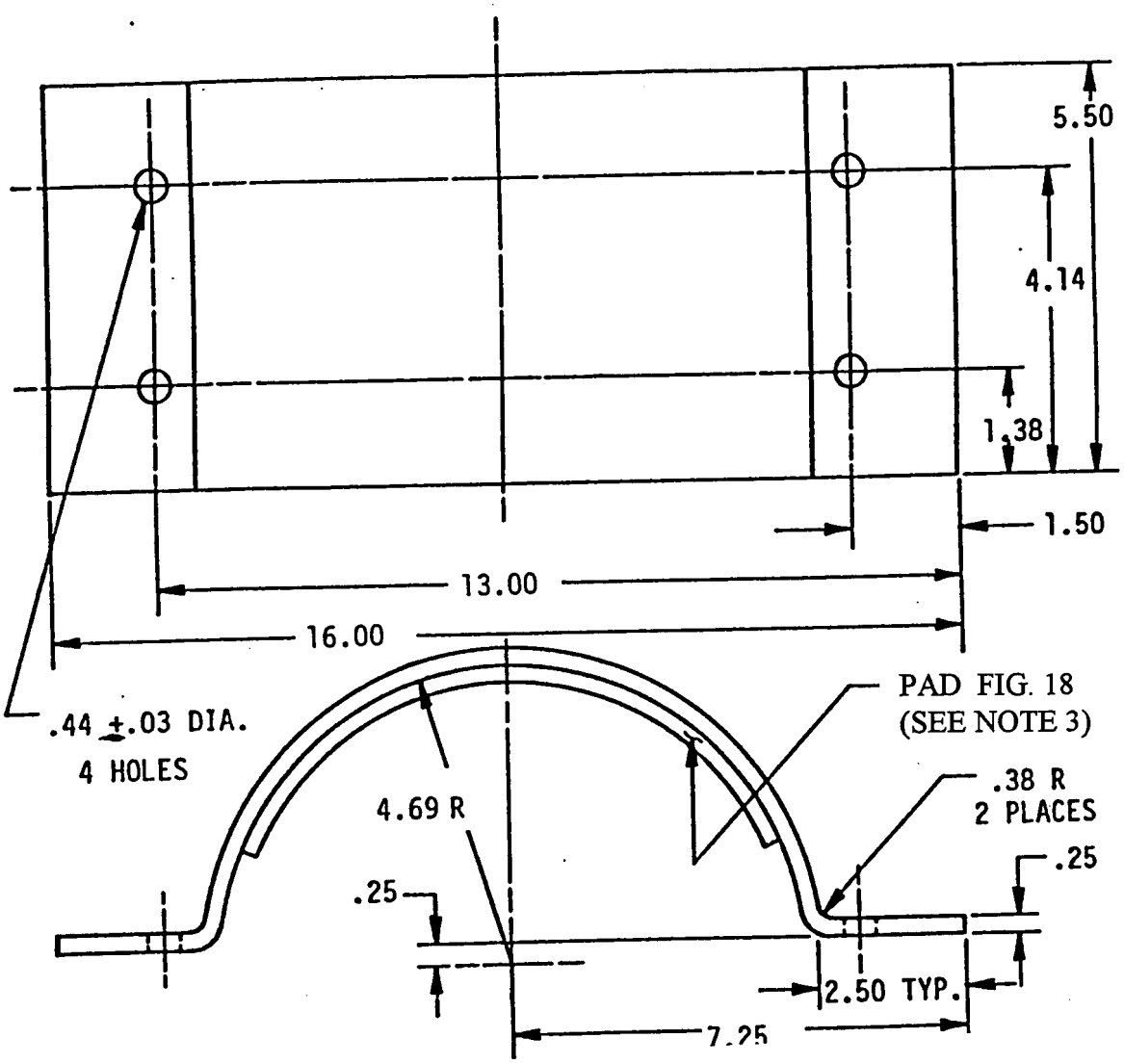
FIGURE 10. Plate.



NOTES:

1. All weld sizes are minimal.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

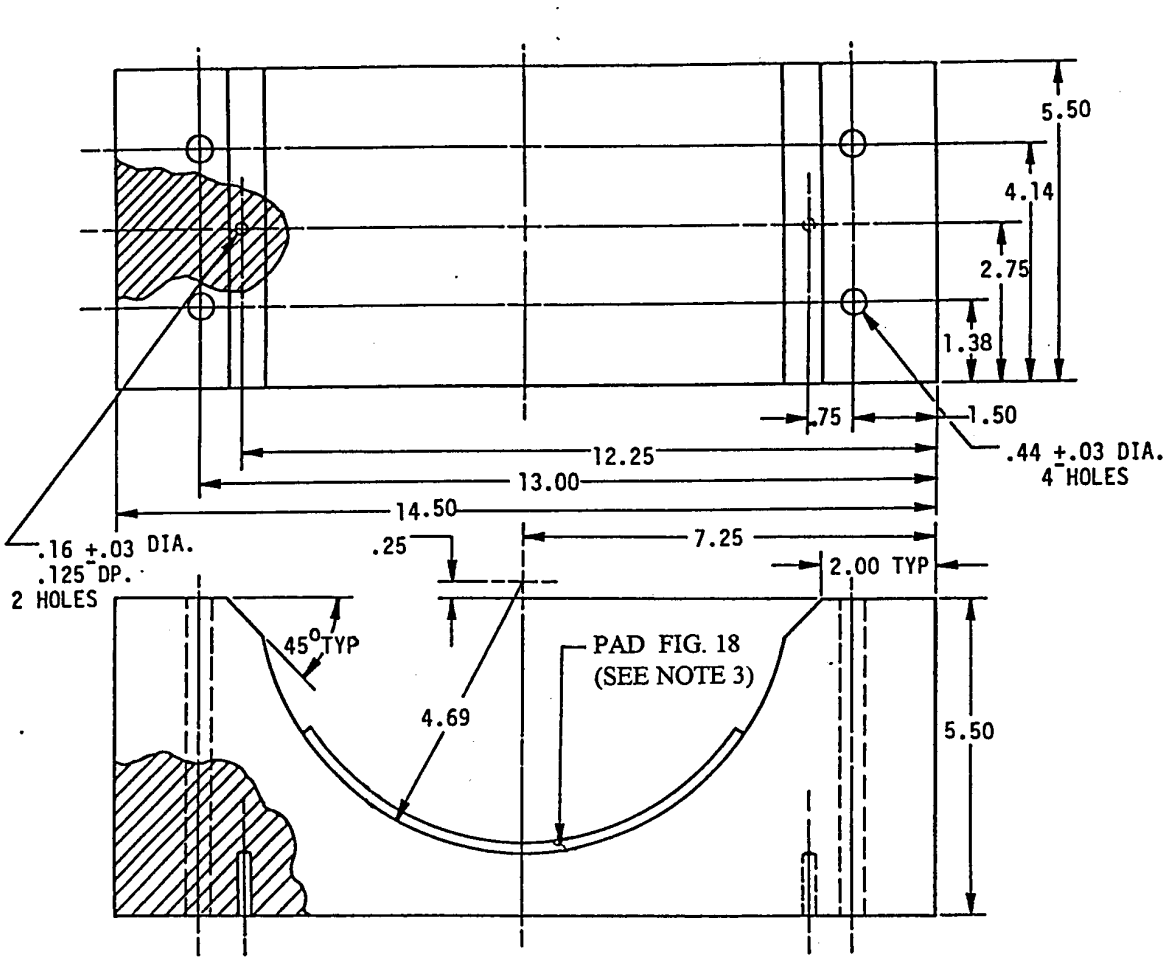
FIGURE 11. Support.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

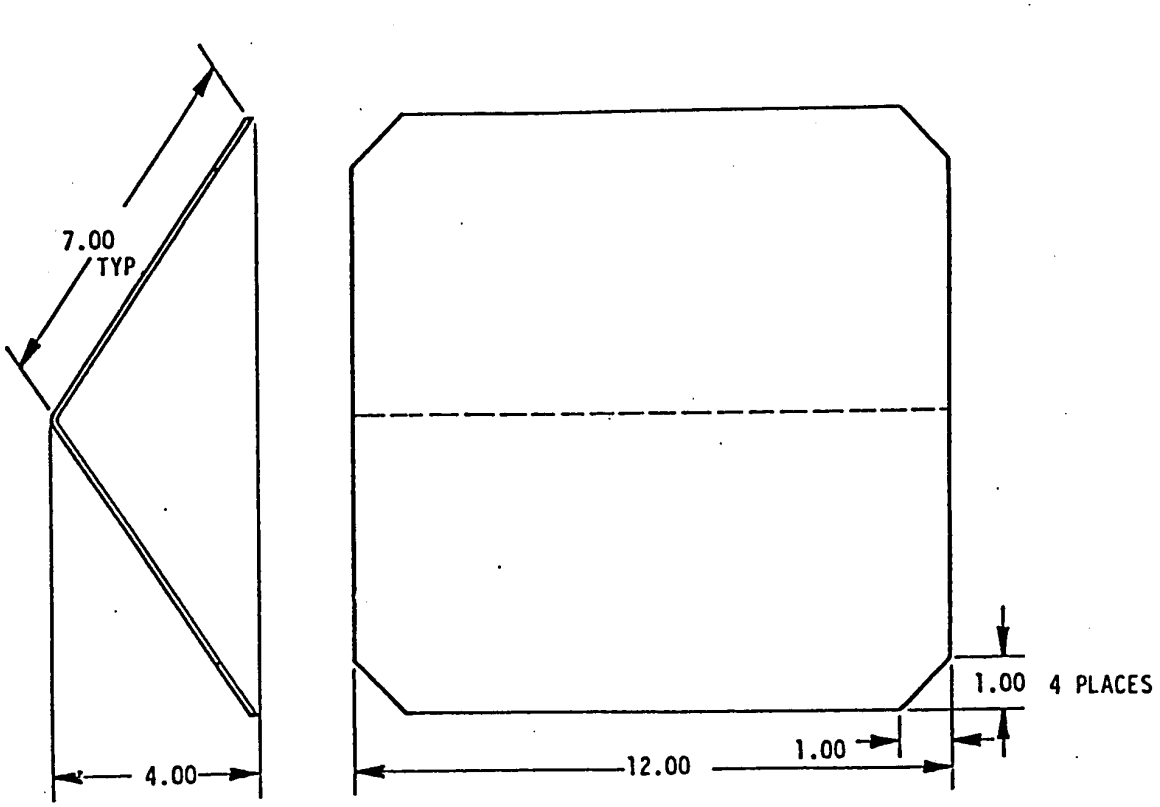
FIGURE 12. Support.



NOTES:

1. Material: Wood conforming to A-A-52520.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 13. Block, front.



NOTES:

1. Material: Steel, UNS 1020 to 1030, ASTM A569 or ASTM A366, 0.059 inch thick.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 14. Plug.

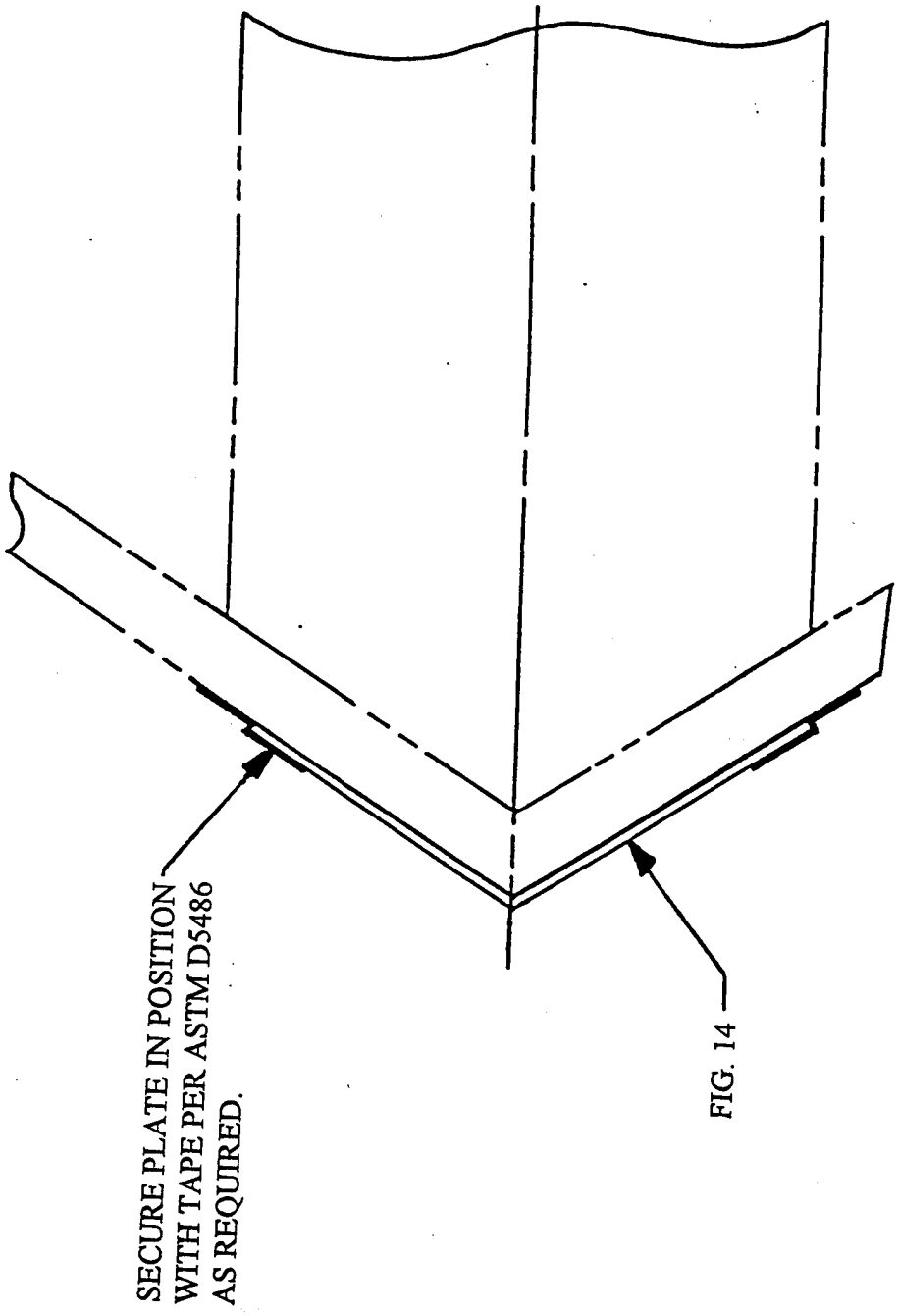
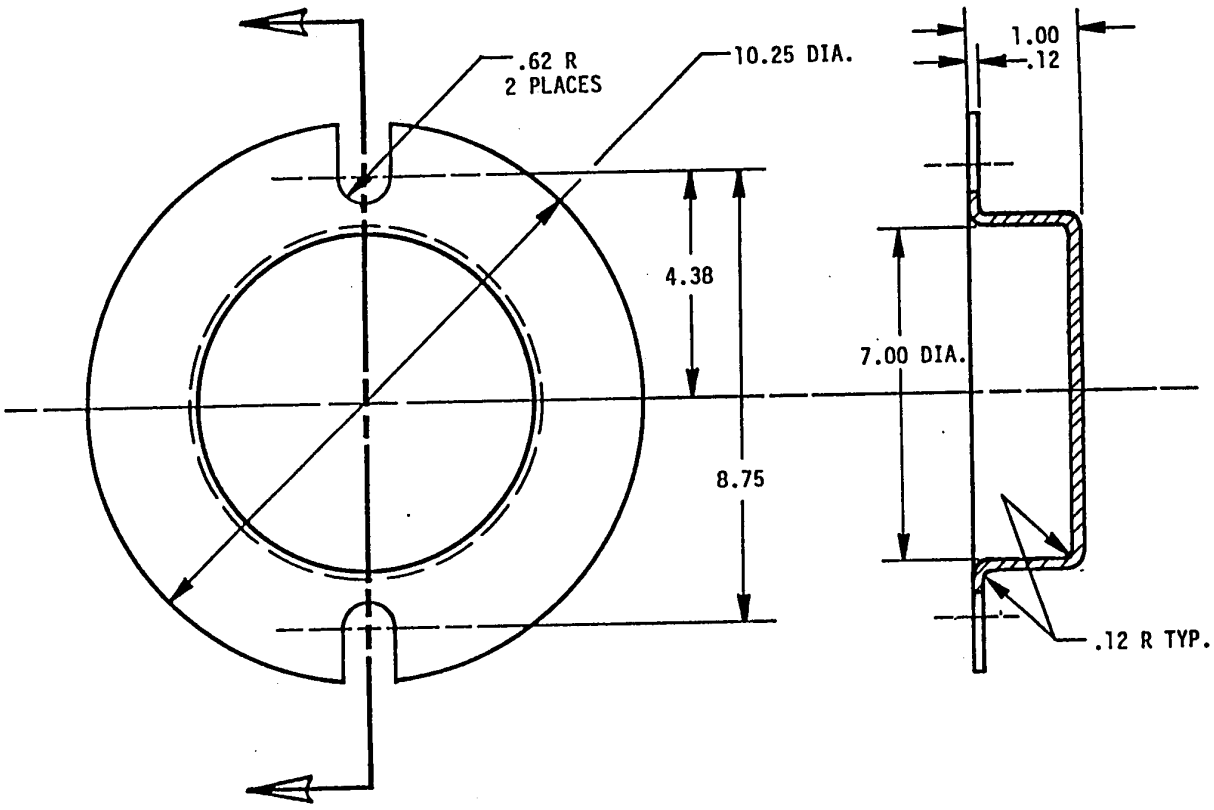


FIGURE 15. Plugging of main gun opening.



NOTE:
Material: Cover, nylon, PA0112 conforming to ASTM D4066.

FIGURE 16. Cover.

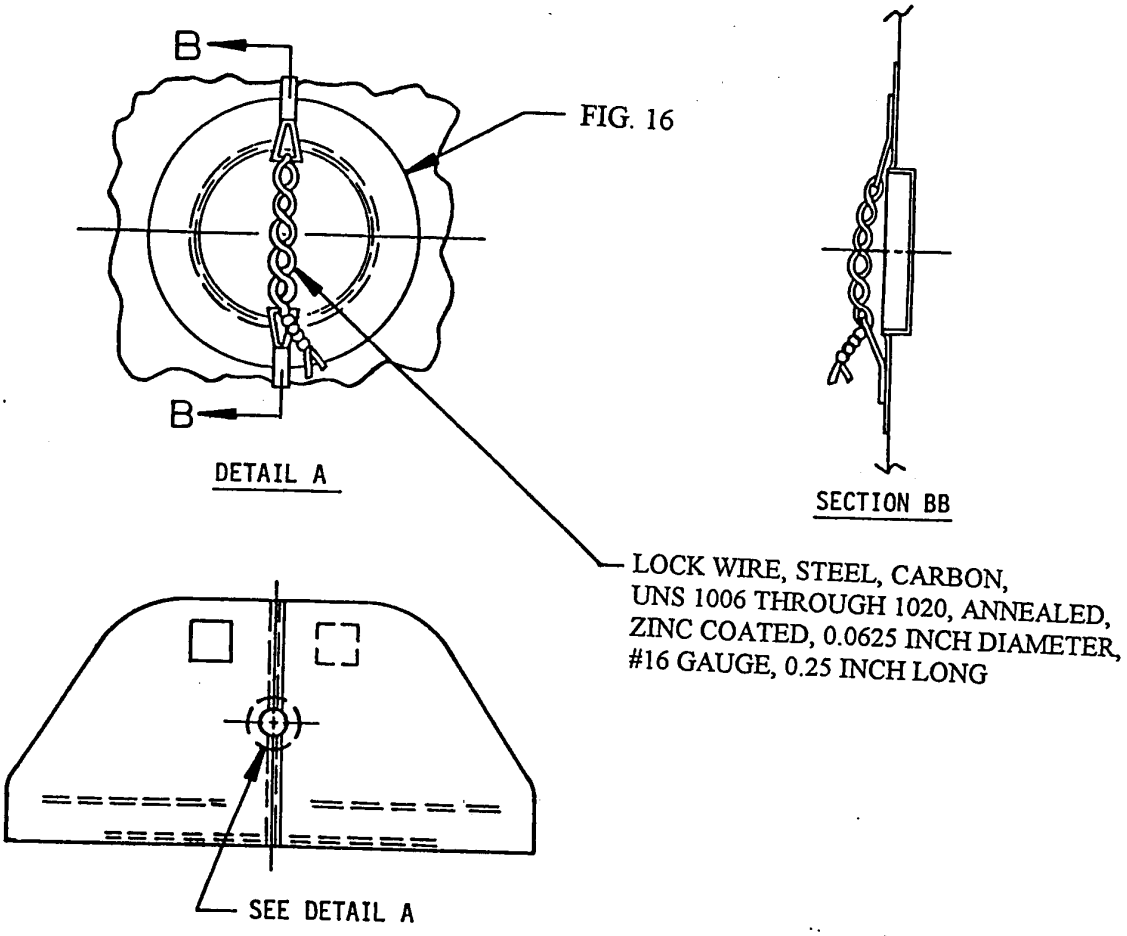
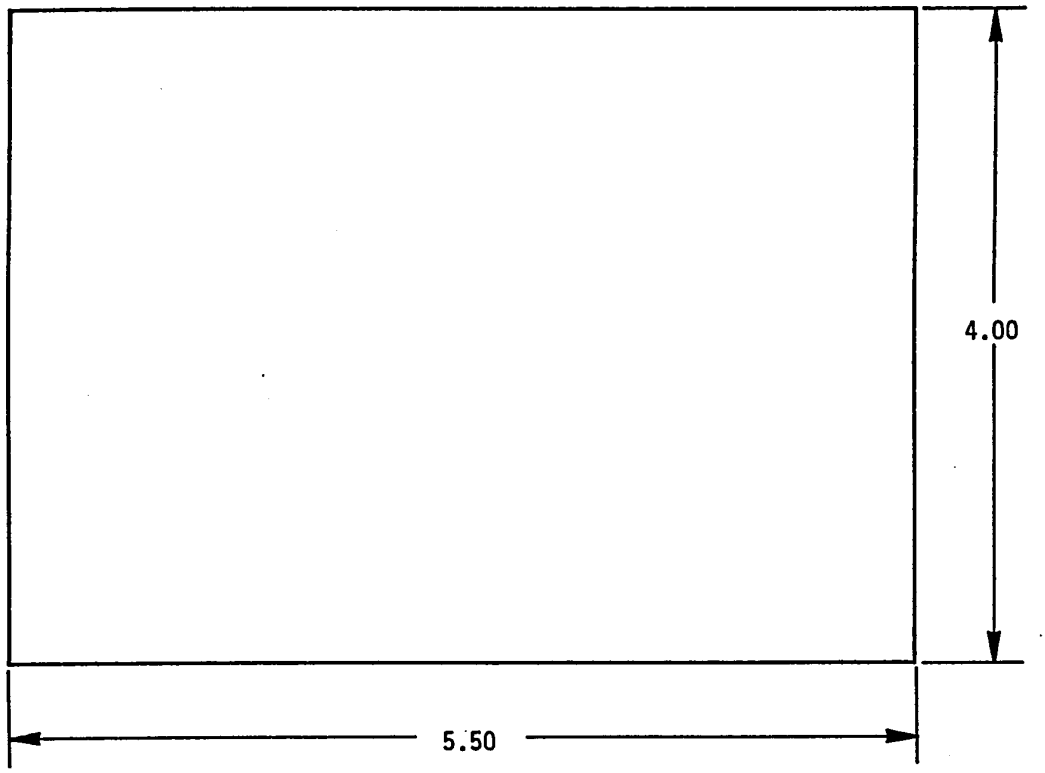


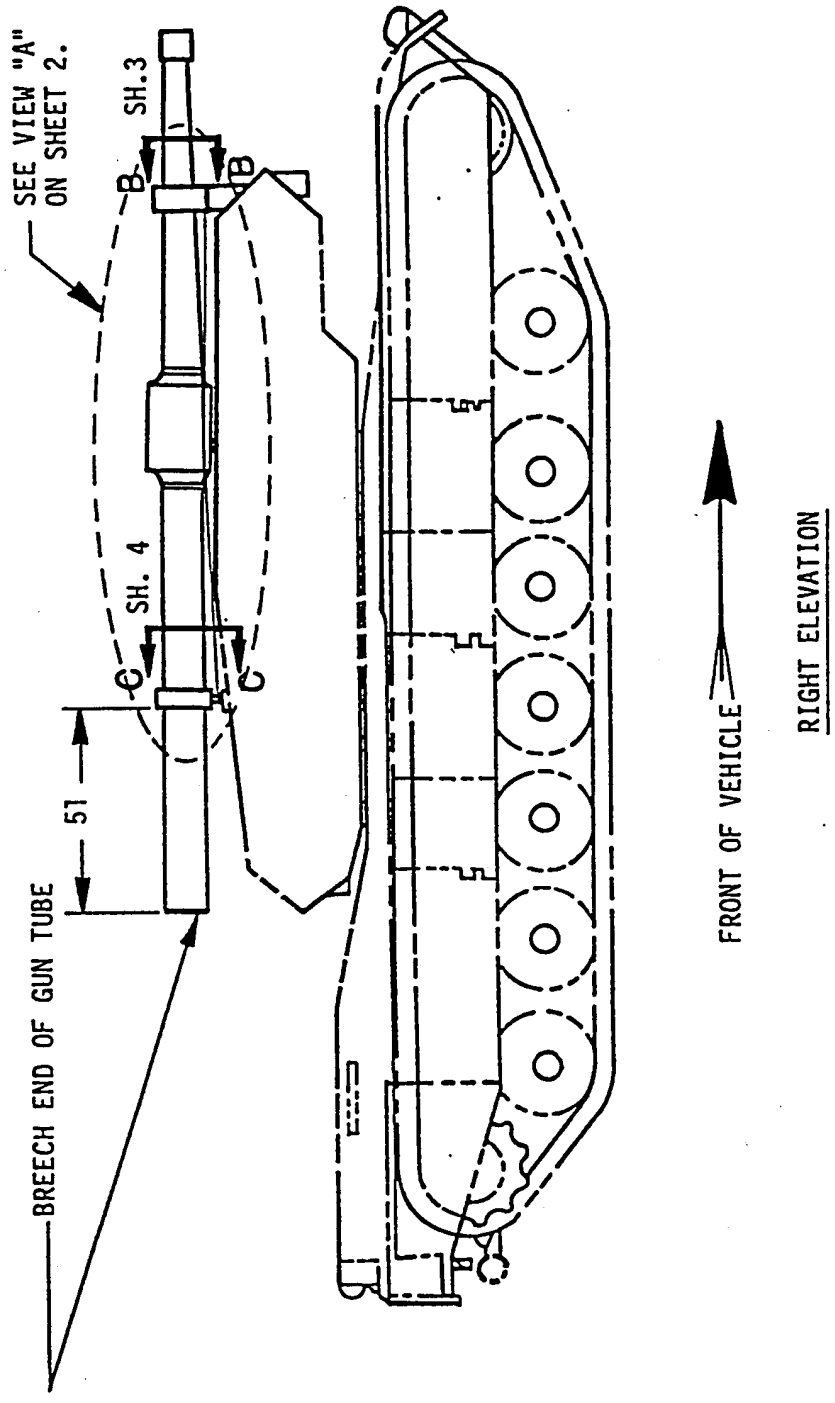
FIGURE 17. Installation, gun tube opening cover in closure cover.



NOTE:

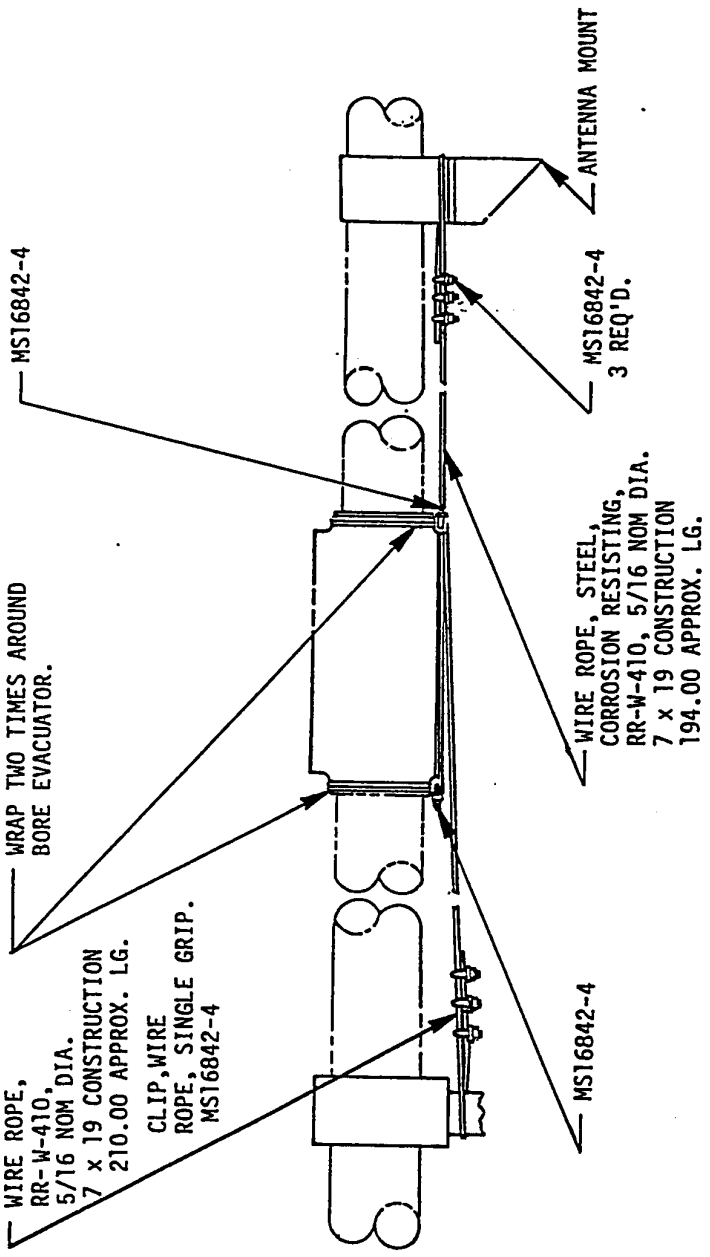
Material: Rubber per MIL-R-3065, grade SC 715 A, B.

FIGURE 18. Pad.



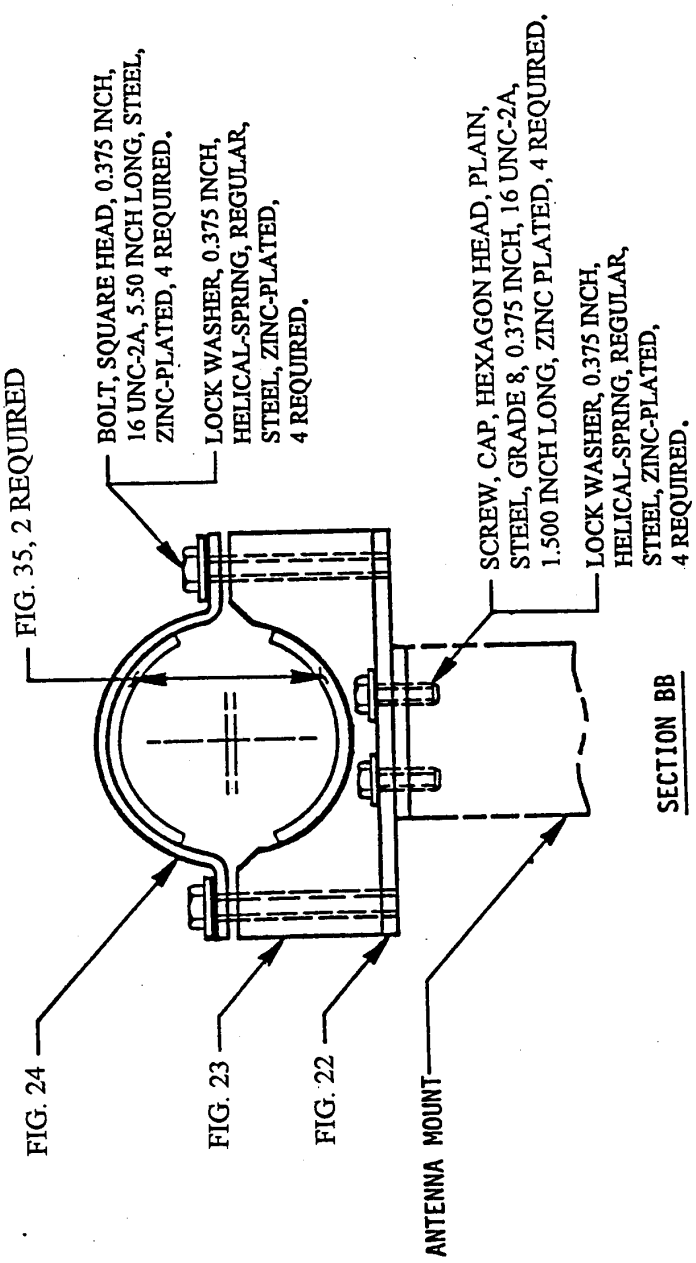
SHEET 1 OF 4

FIGURE 19. Installation, shipping 120MM gun tube.



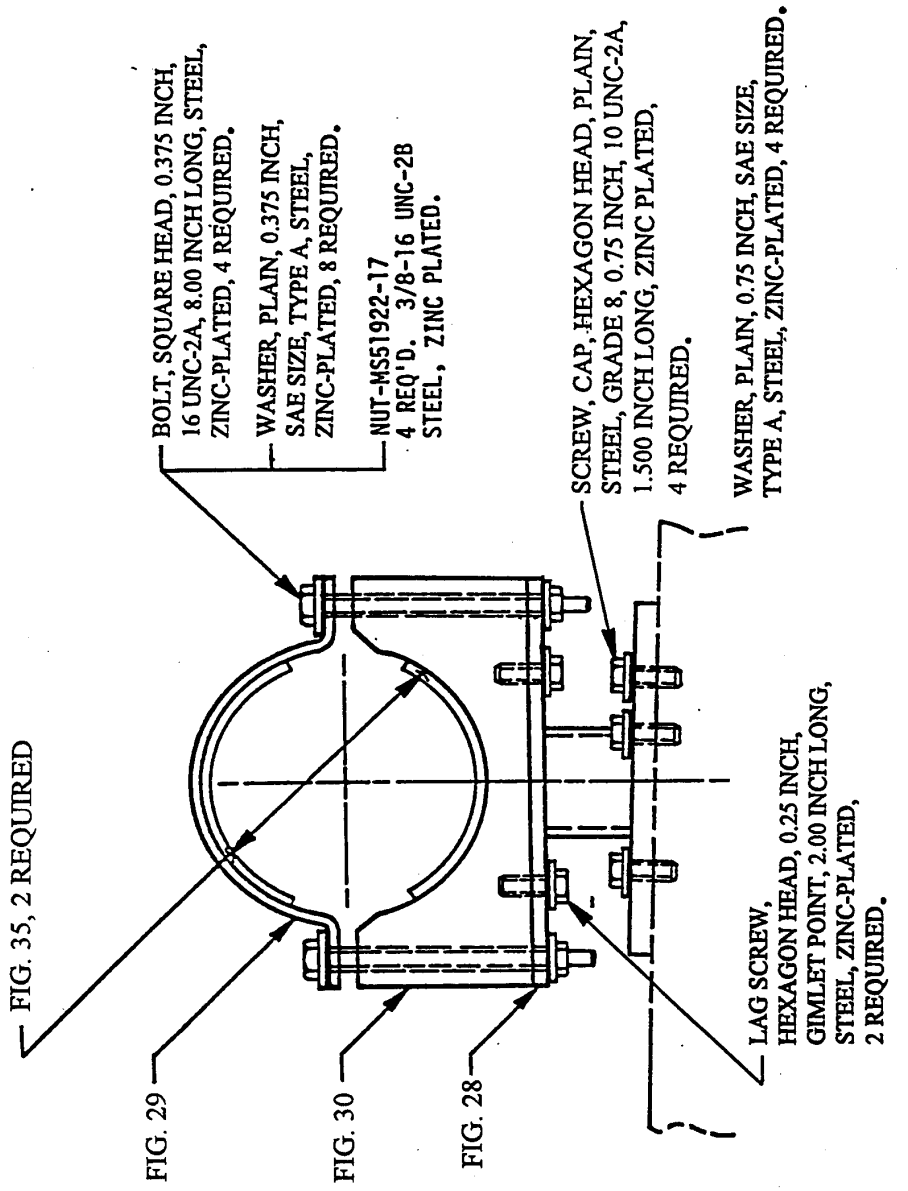
SHEET 2 OF 4

FIGURE 19. Installation, shipping 120MM gun tube - Continued.



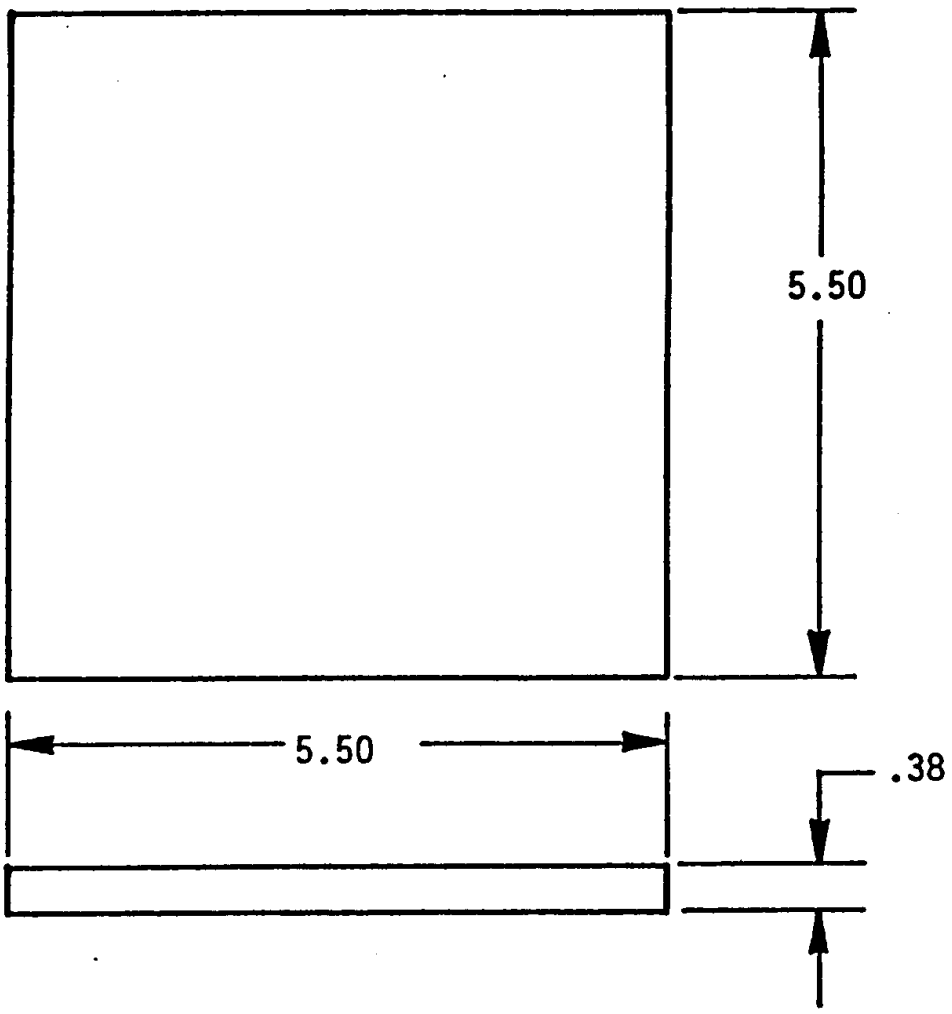
SHEET 3 OF 4

FIGURE 19. Installation, shipping 120MM gun tube - Continued.



SHEET 4 OF 4

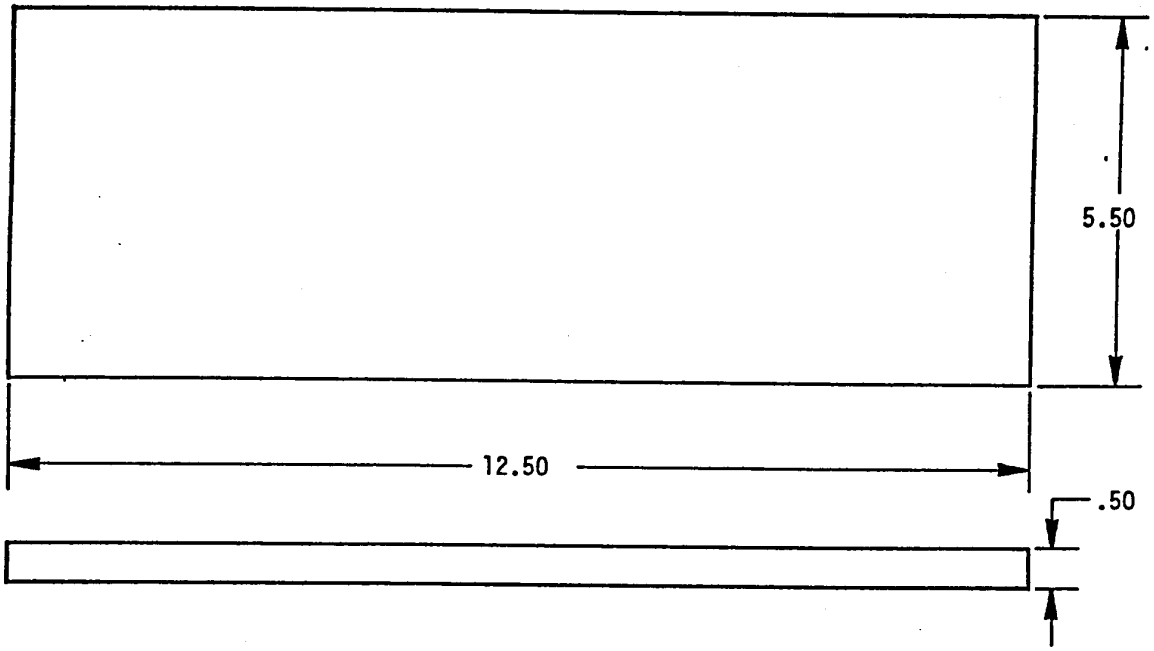
FIGURE 19. Installation, shipping 120MM gun tube - Continued.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.

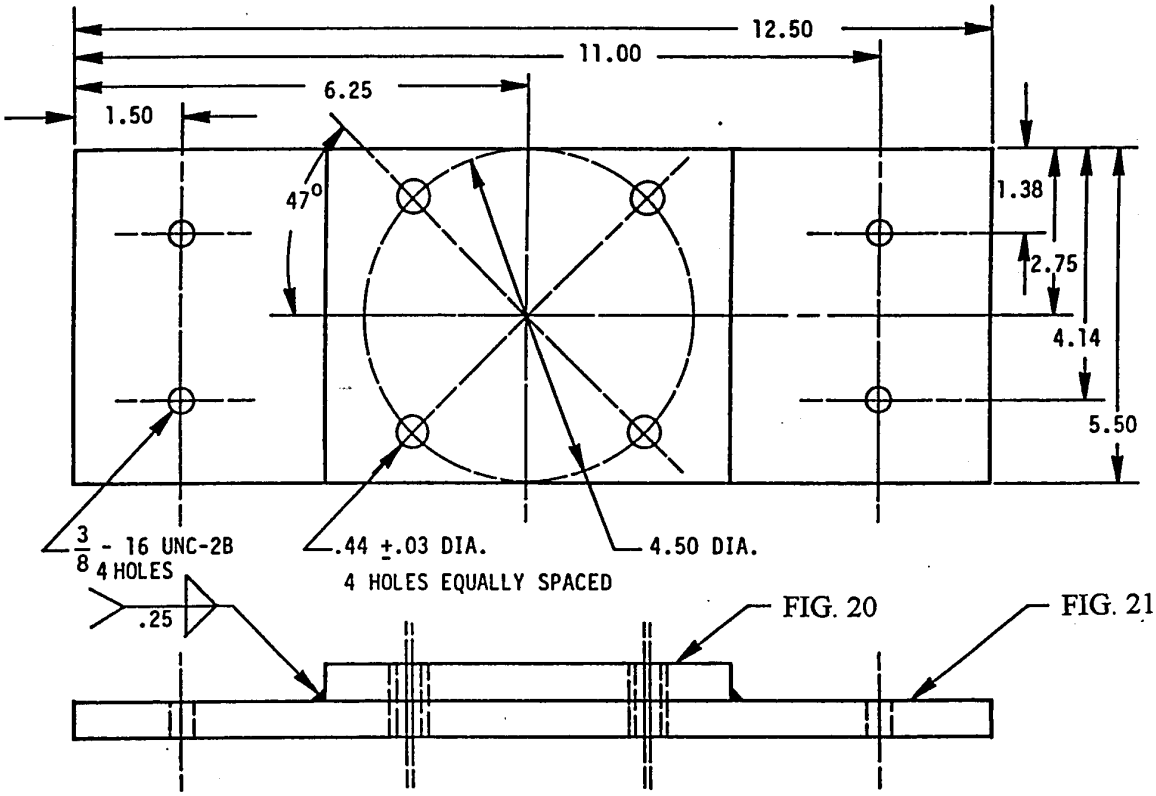
FIGURE 20. Plate.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A576.
2. Remove all burrs and sharp edges.

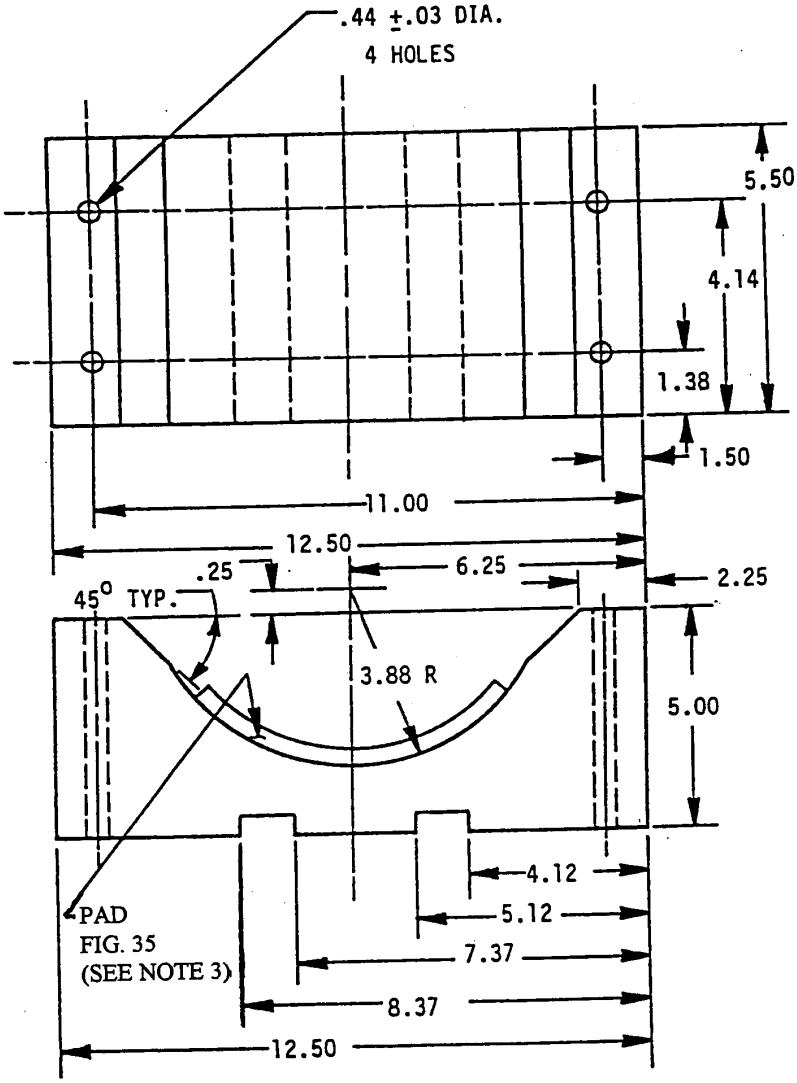
FIGURE 21. Plate.



NOTES:

1. All weld sizes are minimum.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

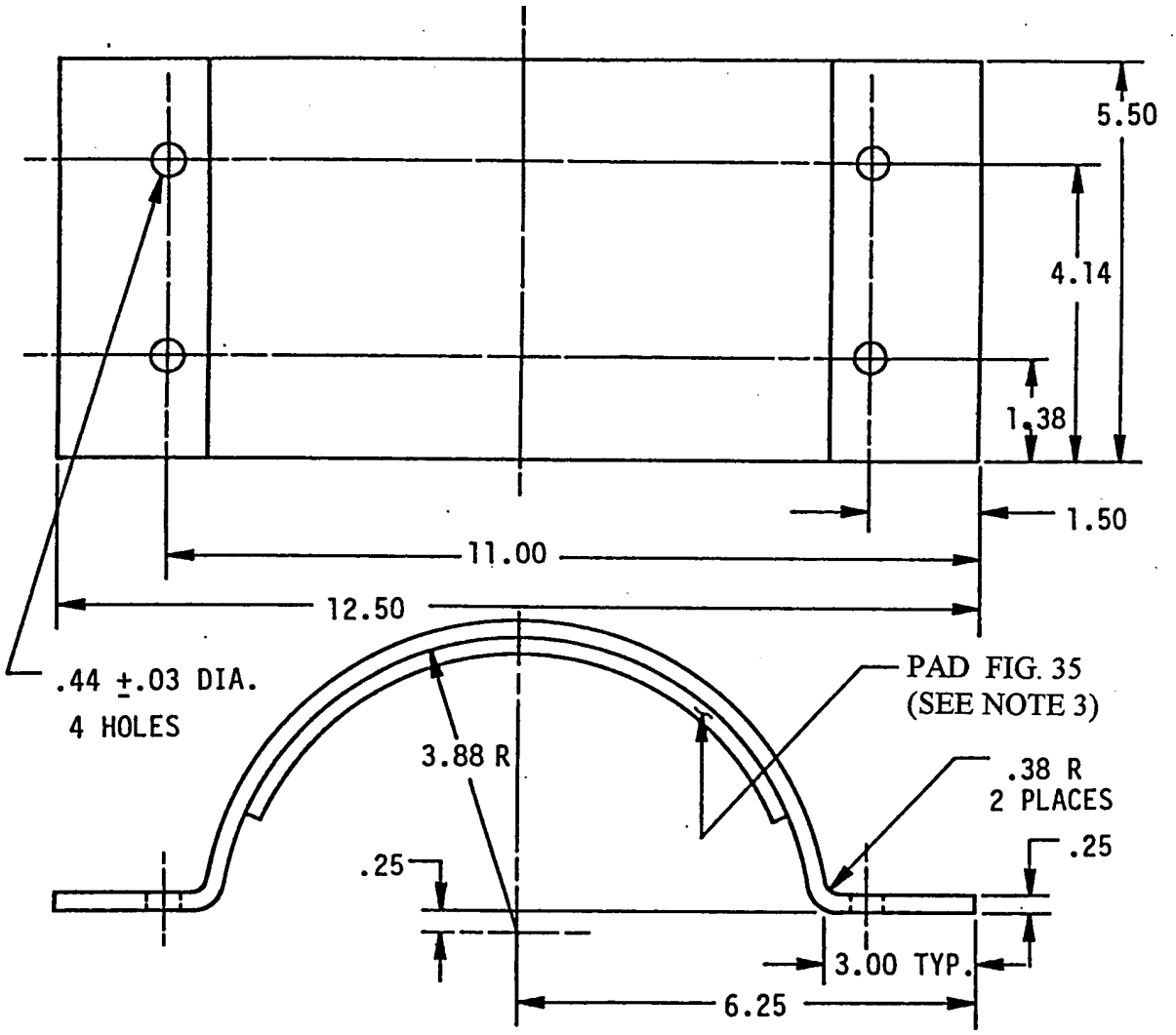
FIGURE 22. Bracket.



NOTES:

1. Material: Wood conforming to A-A-52520.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

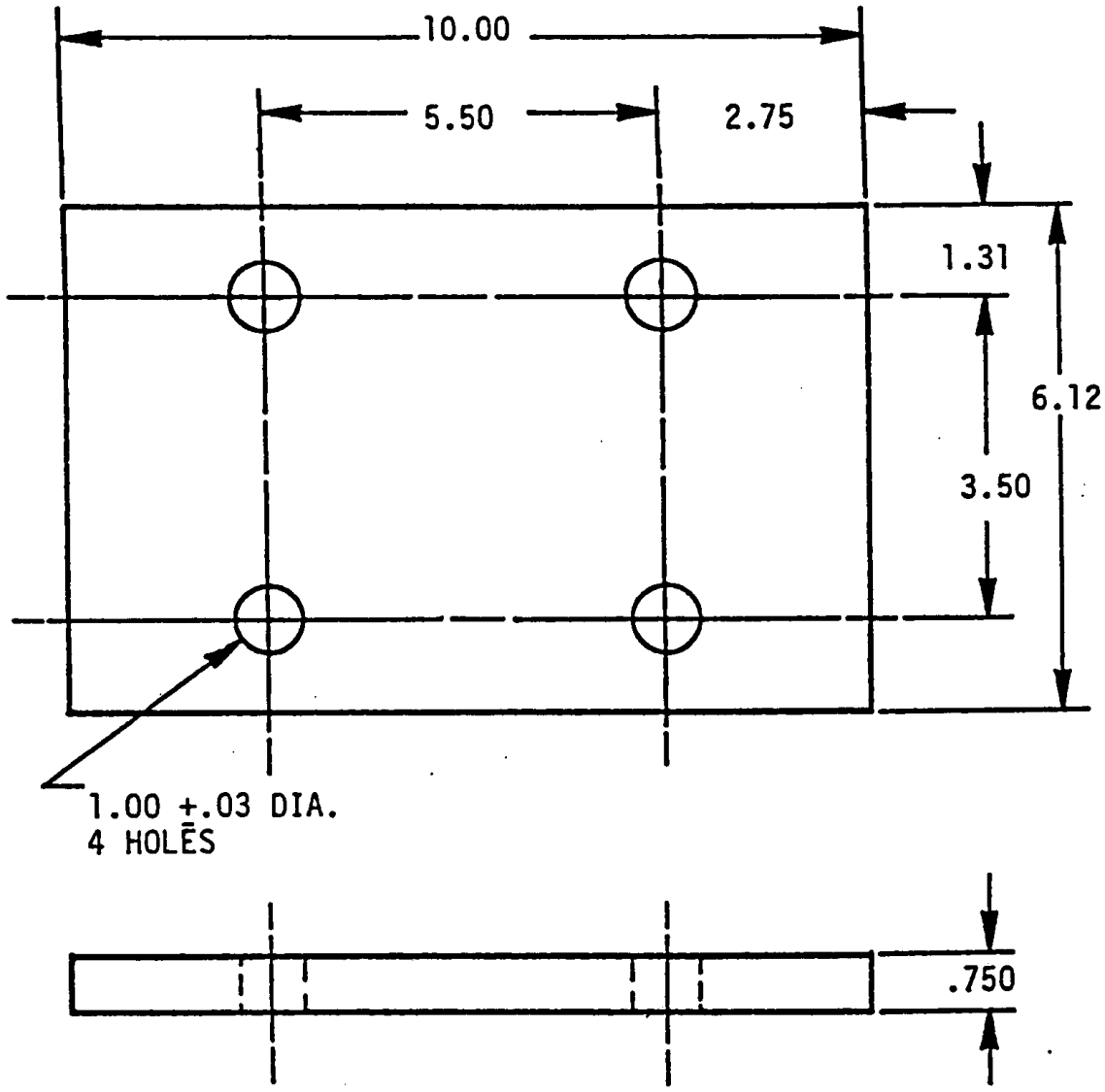
FIGURE 23. Block, rear.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

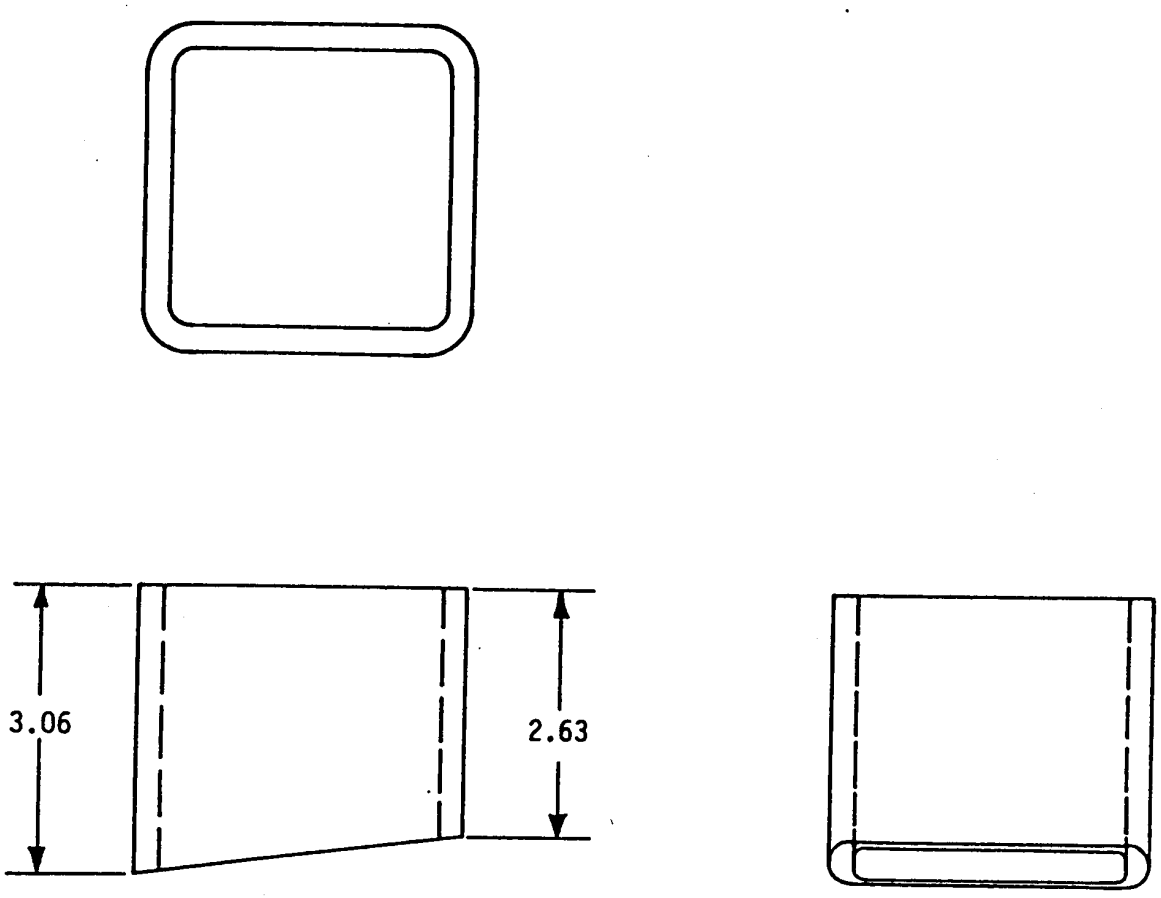
FIGURE 24. Bracket.



NOTES:

1. Material: Steel, UNS 1010 or 1020, ASTM A576 or ASTM A36.
2. Remove all burrs and sharp edges.

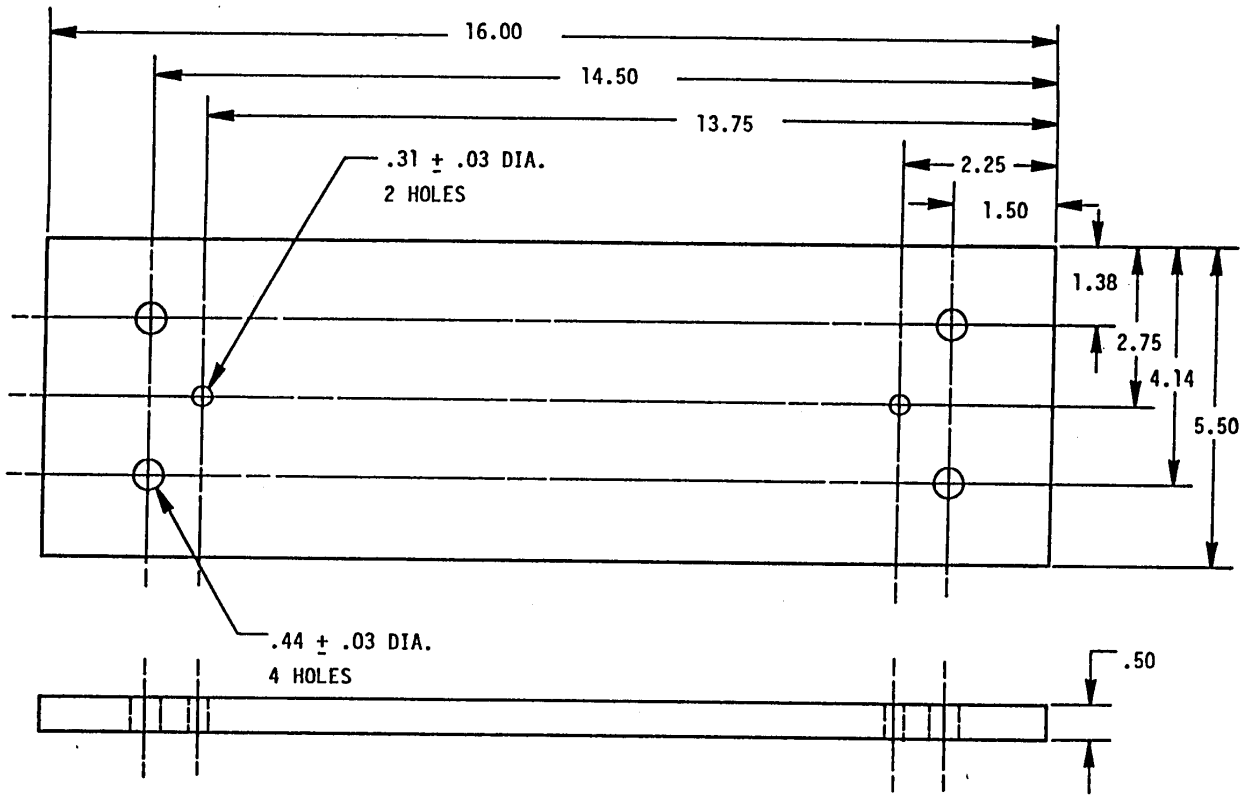
FIGURE 25. Plate.



NOTES:

1. Material: Steel, tube, ASTM A500 or ASTM A501, grade 8, 3.50 inches square x 0.25 inch wall.
2. Remove all burrs and sharp edges.

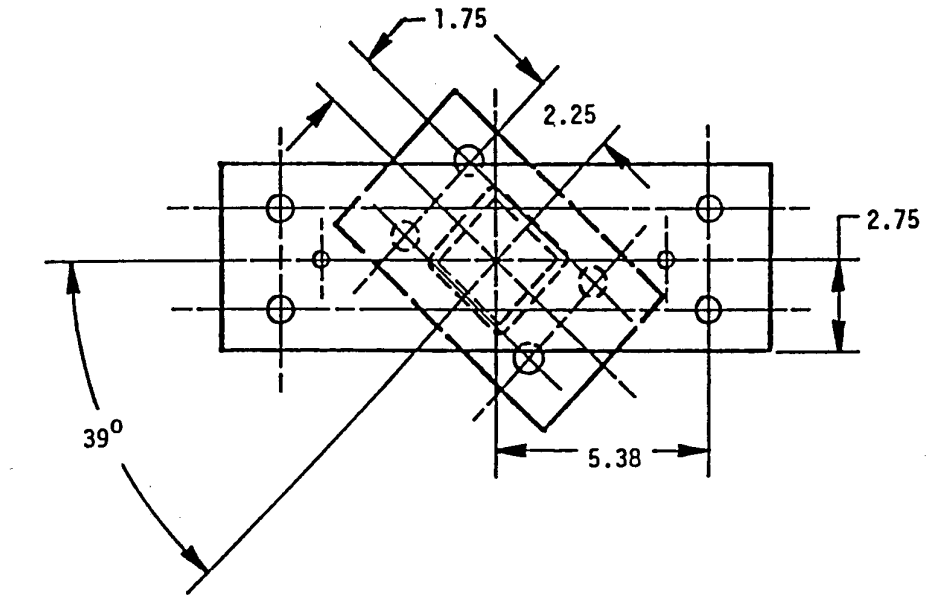
FIGURE 26. Steel tubing.

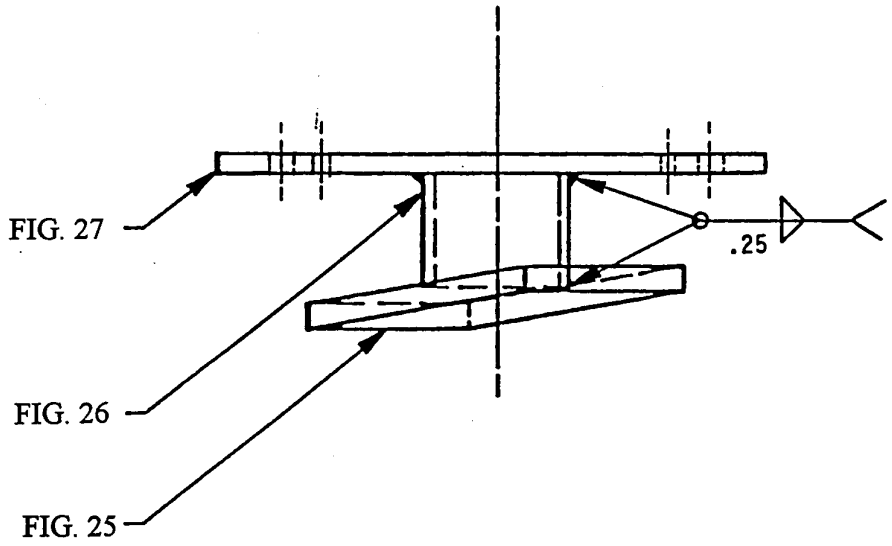


NOTES:

1. Material: Steel, carbon, ASTM A36 or UNS 1010 to 1020, ASTM A576.
2. Remove all burrs and sharp edges.

FIGURE 27. Plate.

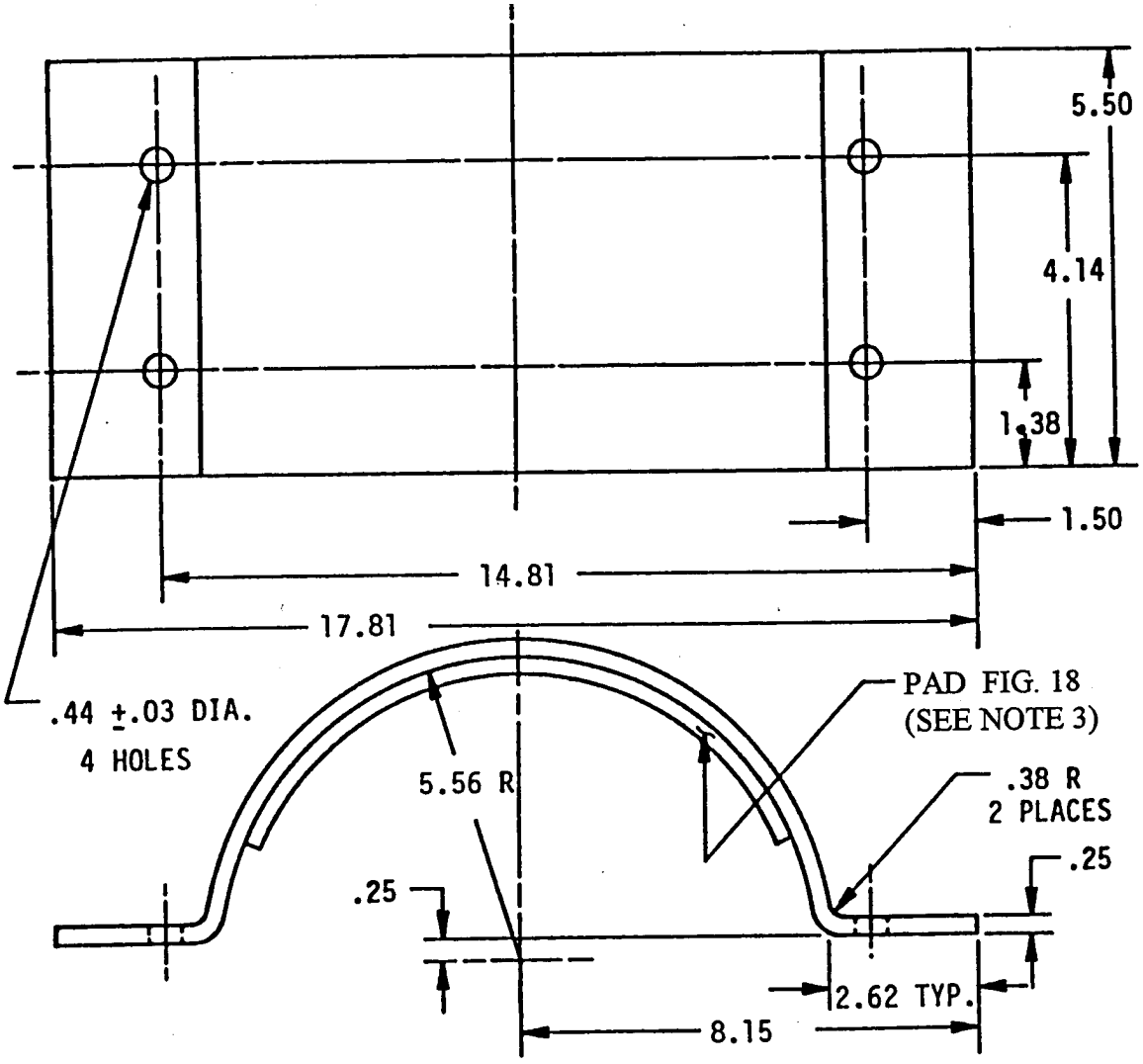




NOTES:

1. All weld sizes are minimal.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

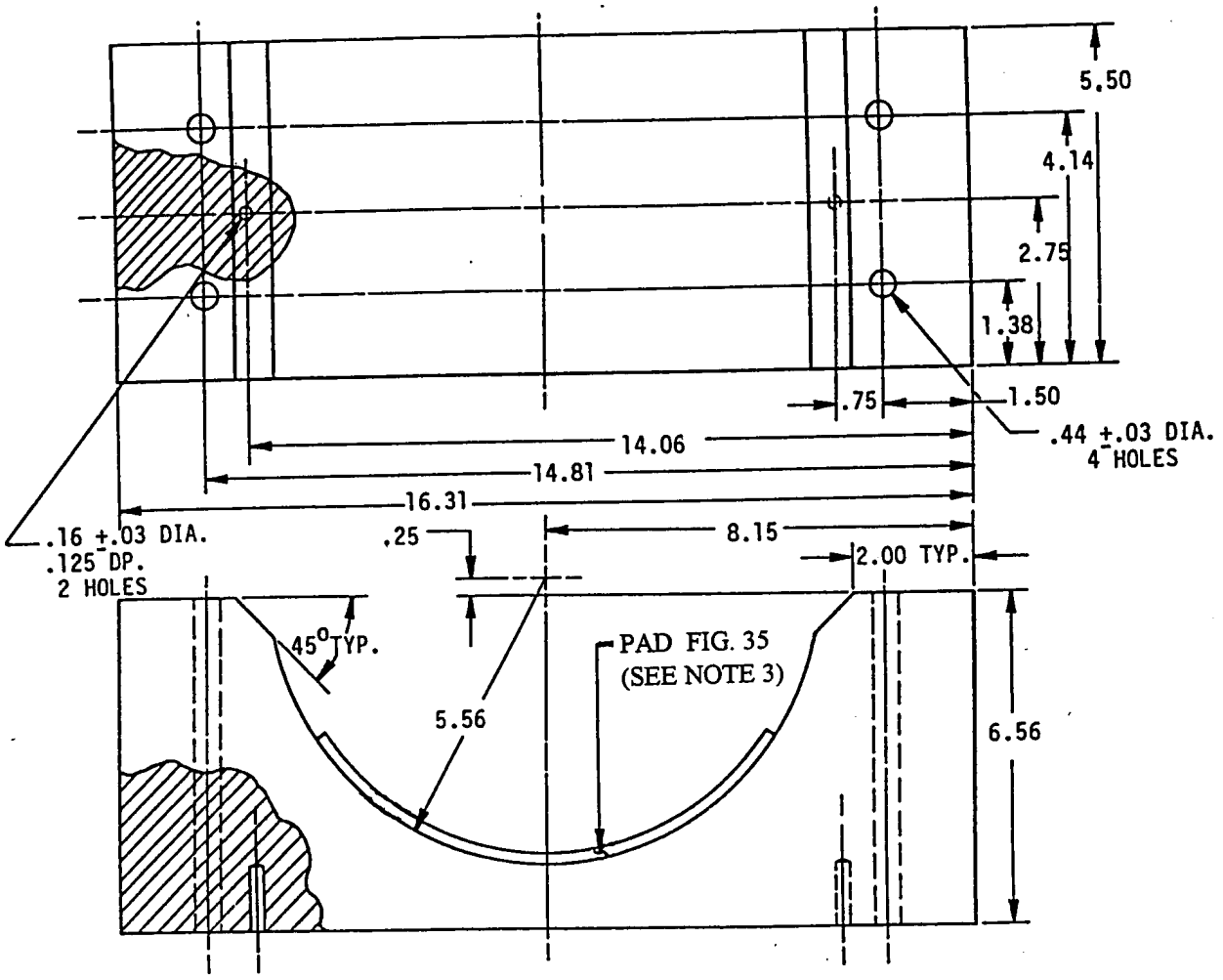
FIGURE 28. Support.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

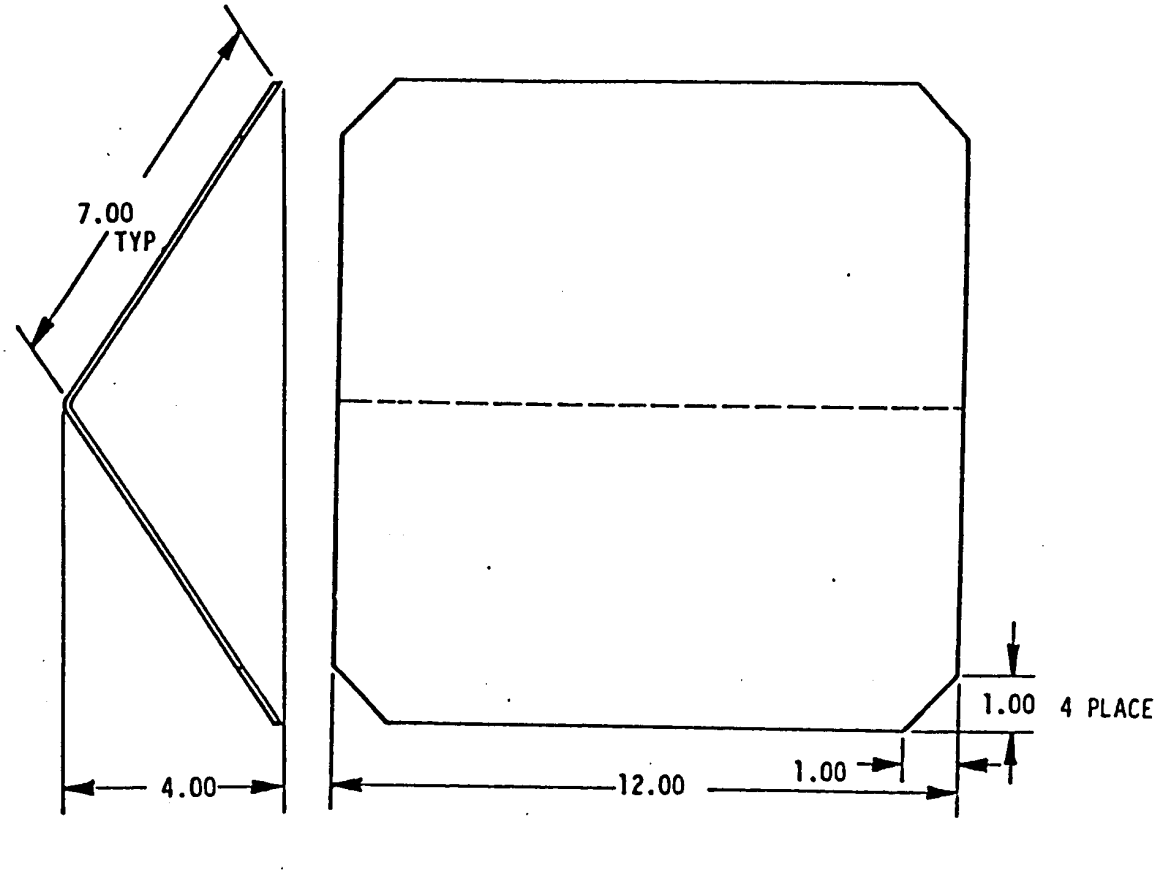
FIGURE 29. Bracket.



NOTES:

1. Material: Wood conforming to A-A-52520.
2. Remove all burrs and sharp edges.
3. Bond with MMM-A-1617, type I adhesive.
4. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 30. Block, front.



NOTES:

1. Material: Steel, UNS 1020 to 1030, ASTM A569 or ASTM A366, 0.059 inch thick.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 31. Plug.

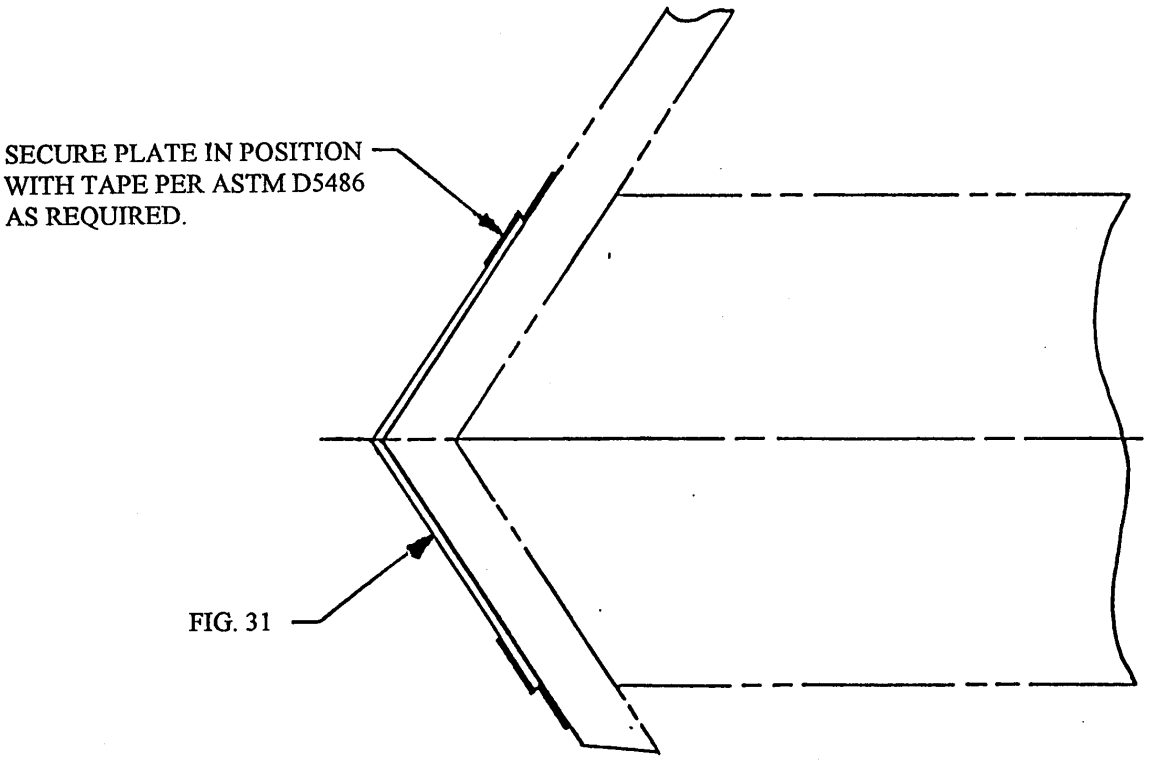
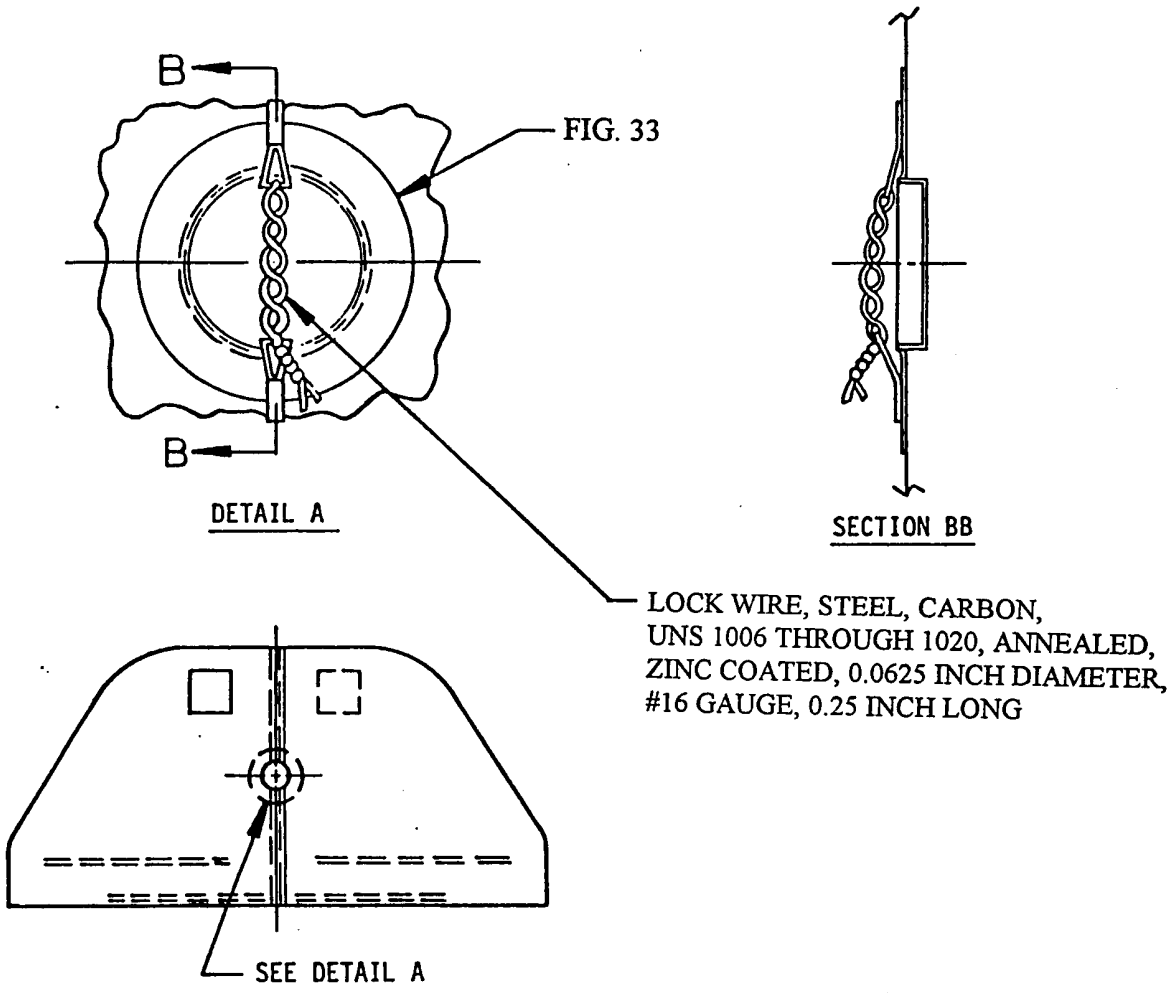


FIGURE 32. Plugging of main gun opening.



NOTE:
Material: Cover, nylon, PA0112 conforming to ASTM D4066.

FIGURE 33. Cover.

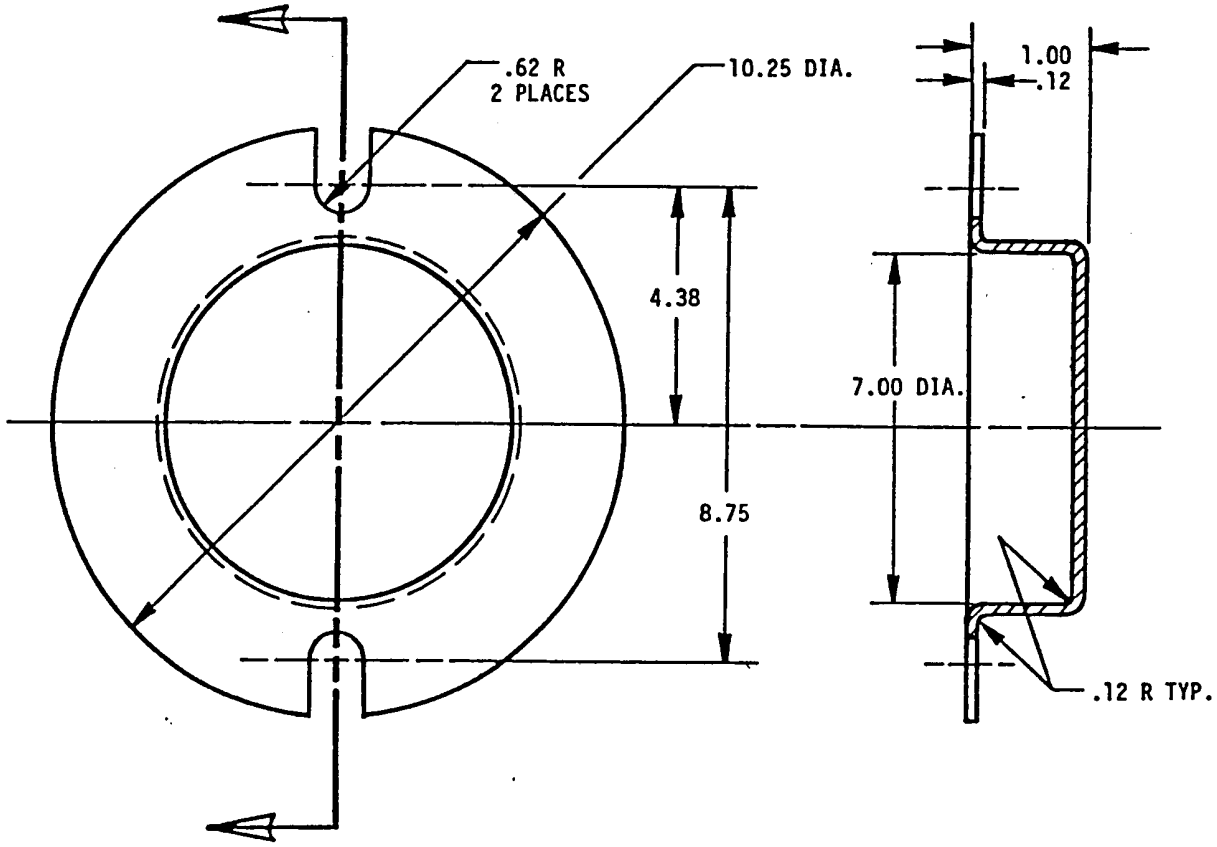
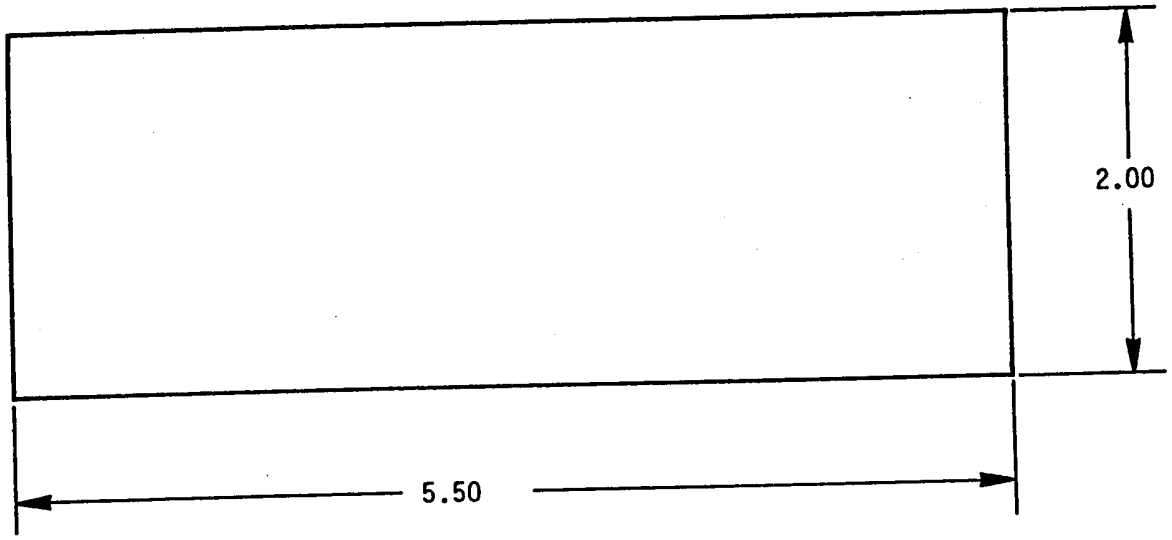


FIGURE 34. Installation, gun tube opening cover in closure cover.



NOTE:
Material: Rubber per MIL-R-3065, grade SC 715 A, B.

FIGURE 35. Pad.

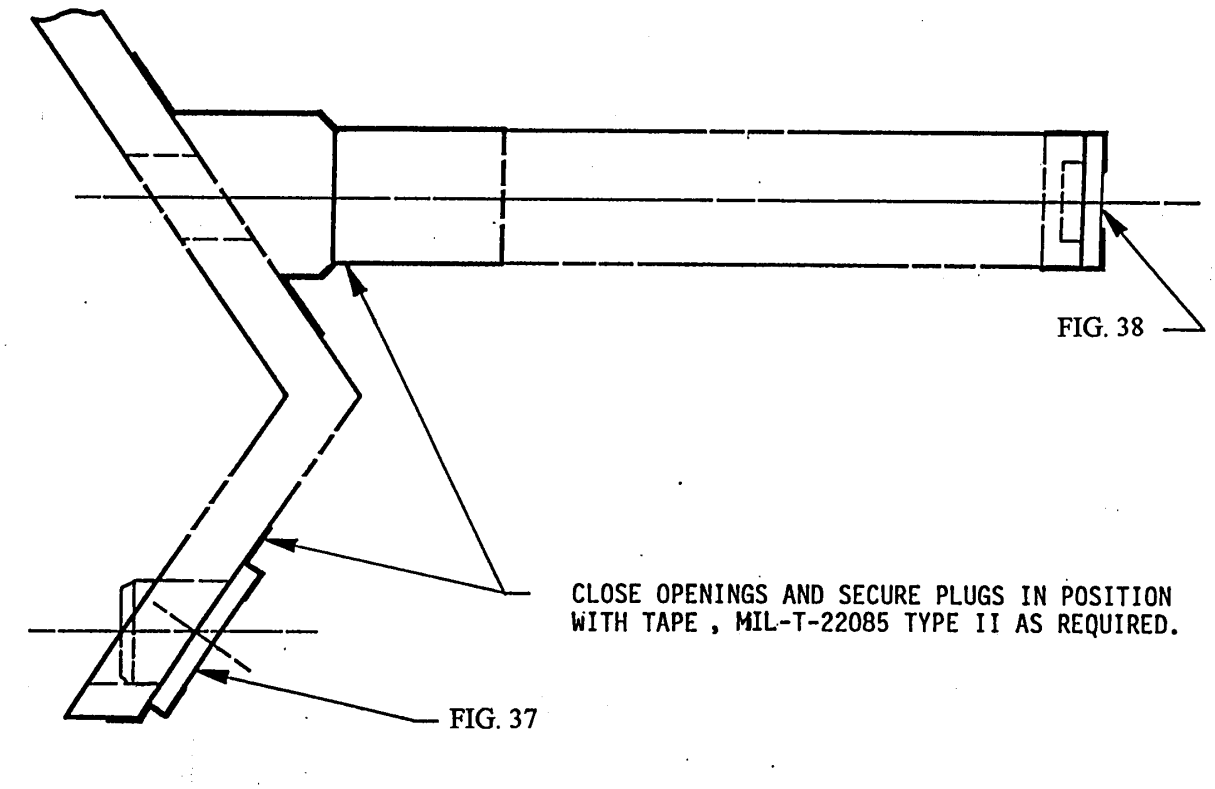
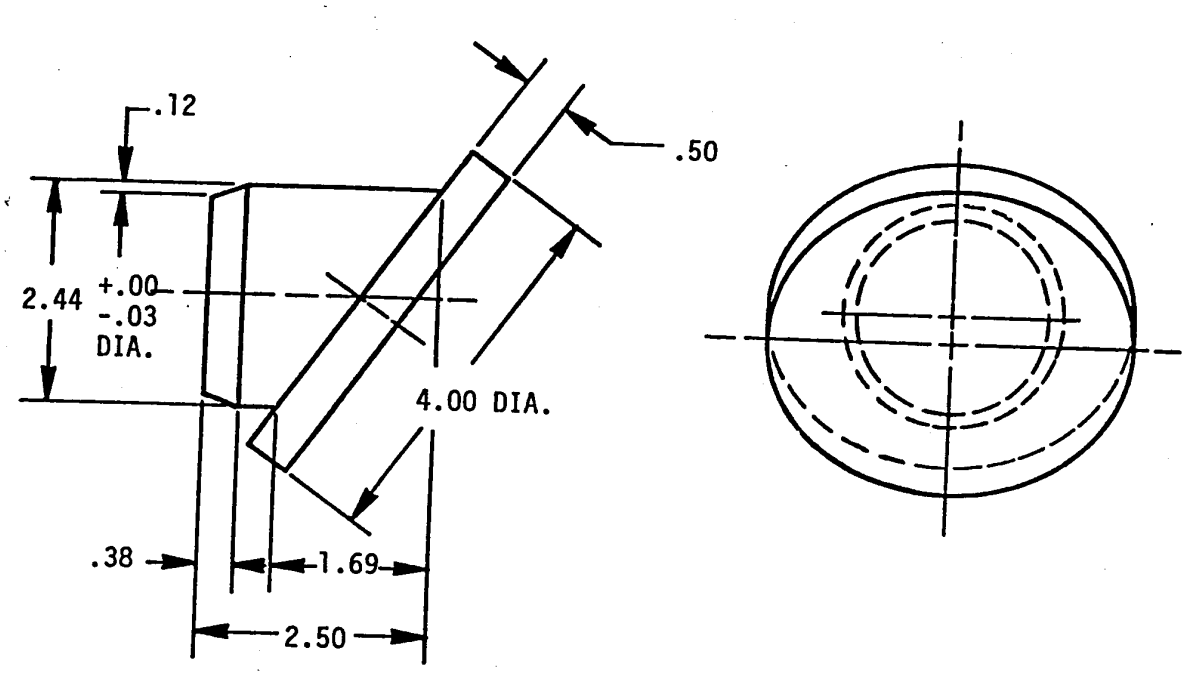


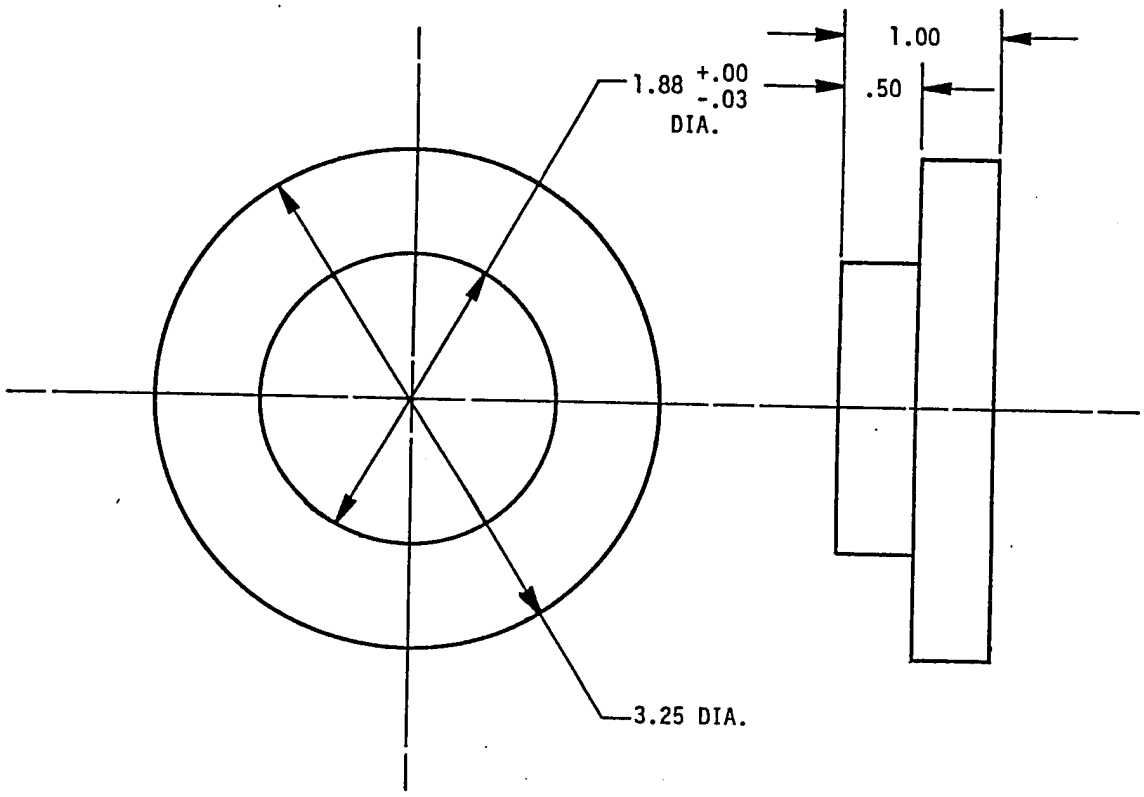
FIGURE 36. Plugging of machine gun and telescope openings.



NOTES:

1. Material: Wood.
2. Final finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 37. Plug.



NOTES:

1. Material: Wood.
2. Final finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 38. Plug.

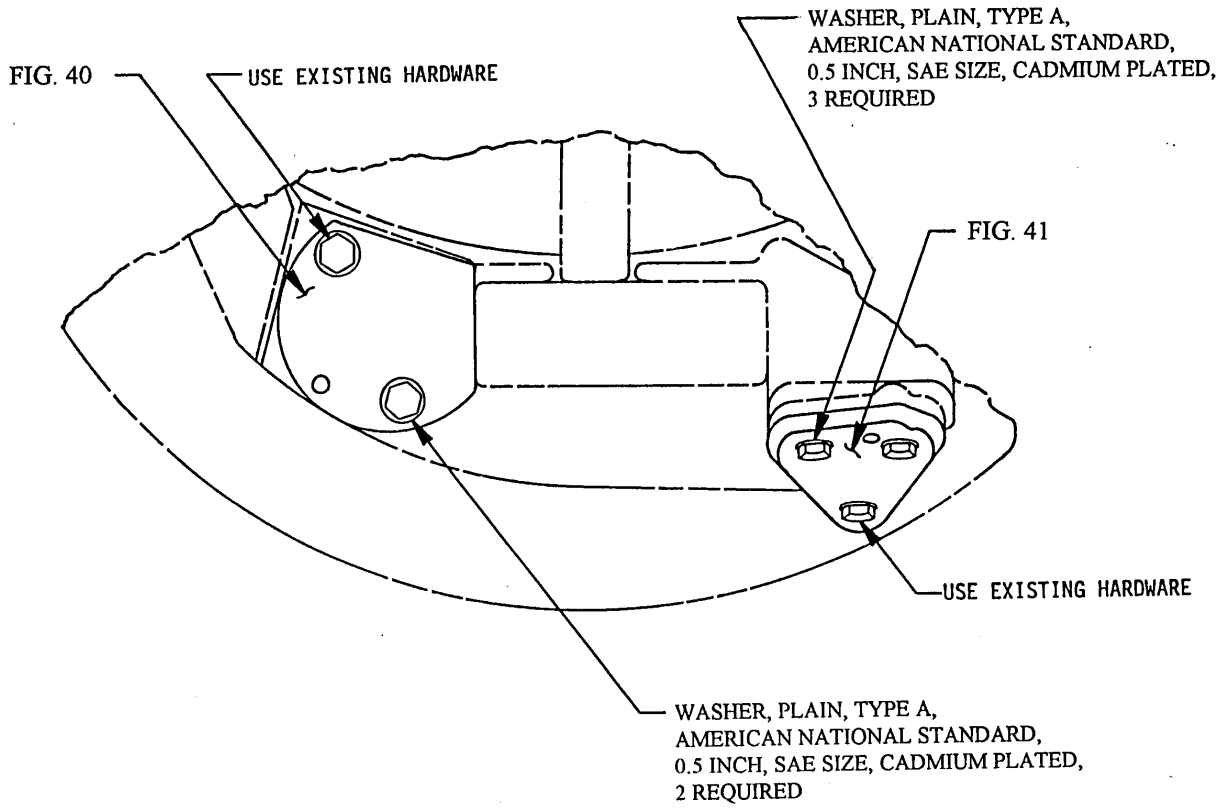
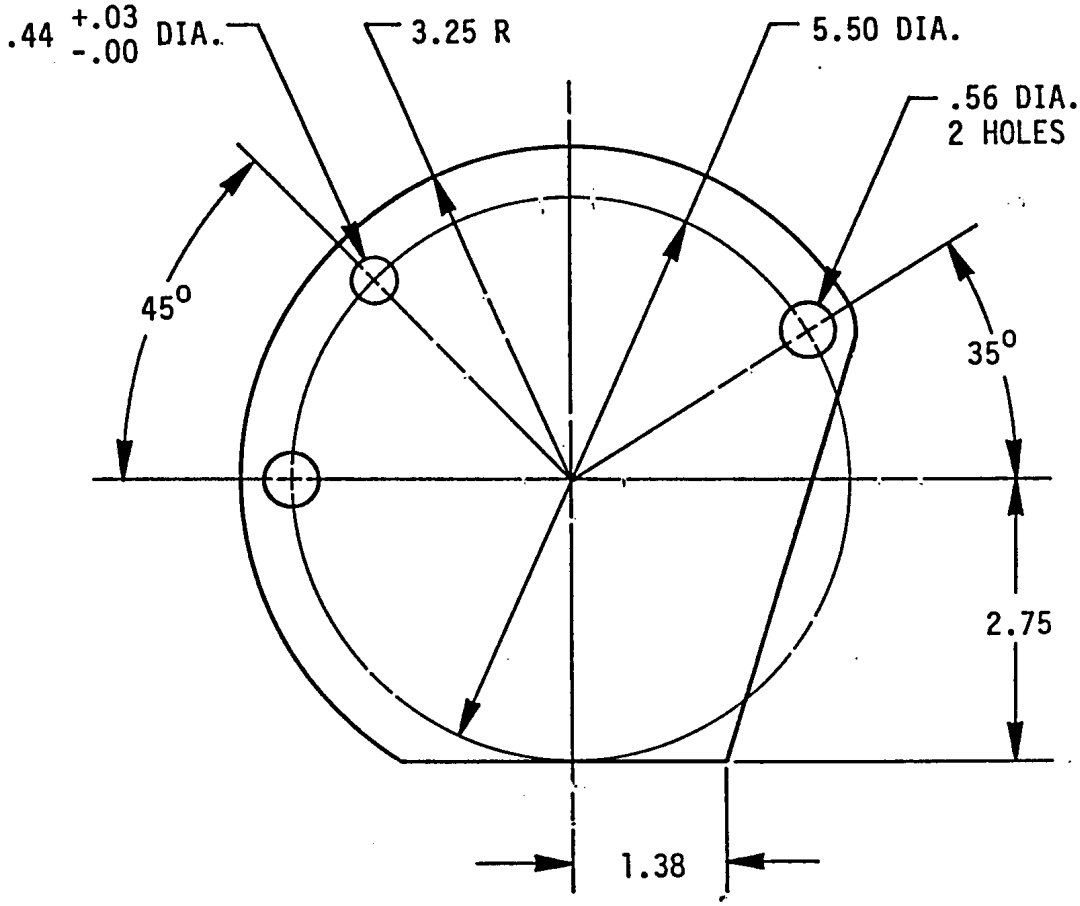


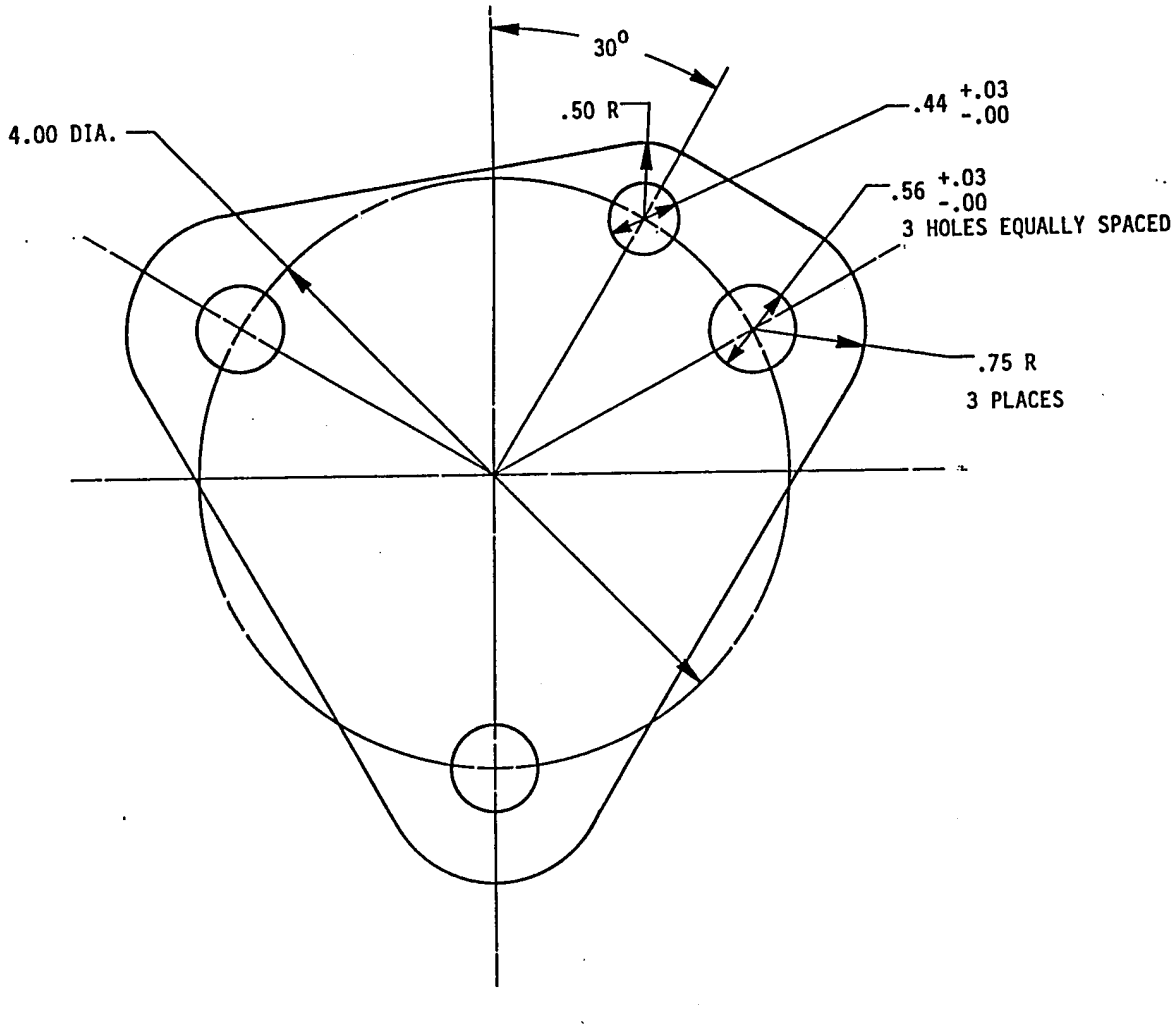
FIGURE 39. Installation covers, commanders weapon station.



NOTES:

1. Material: Plywood, exterior type, A-A-55057, 0.50 inch thick.
2. Final protective finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 40. Cover periscope commanders weapon station.



NOTES:

1. Material: Plywood, exterior type, A-A-55057, 0.50 inch thick.
2. Final protective finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 41. Cover, elevation drive commanders weapon station.

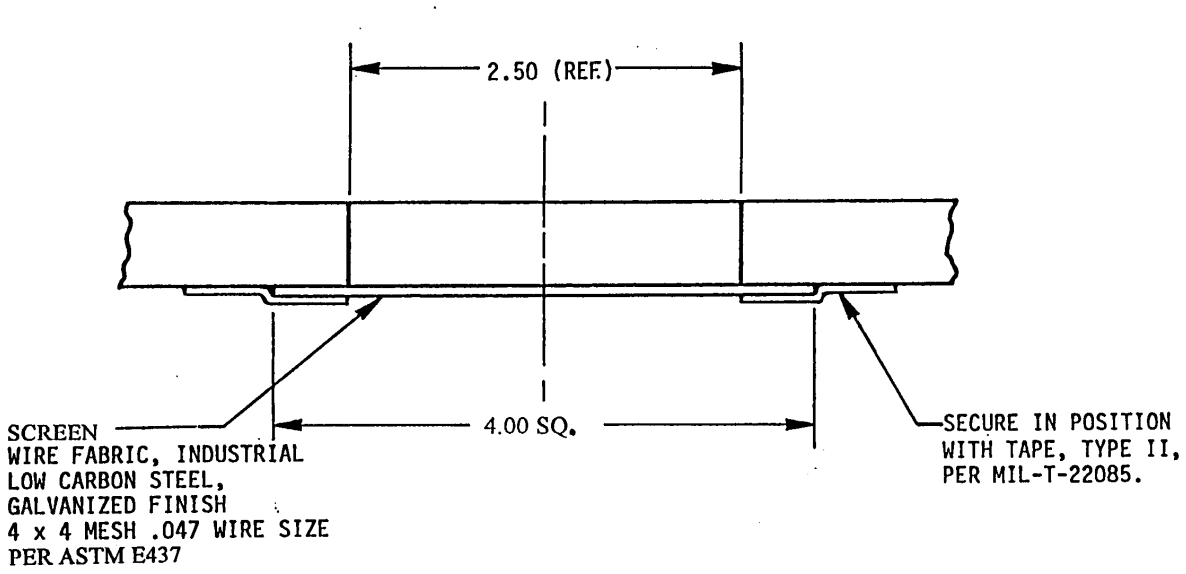


FIGURE 42. Installation engine compartment drain valve/port screen.

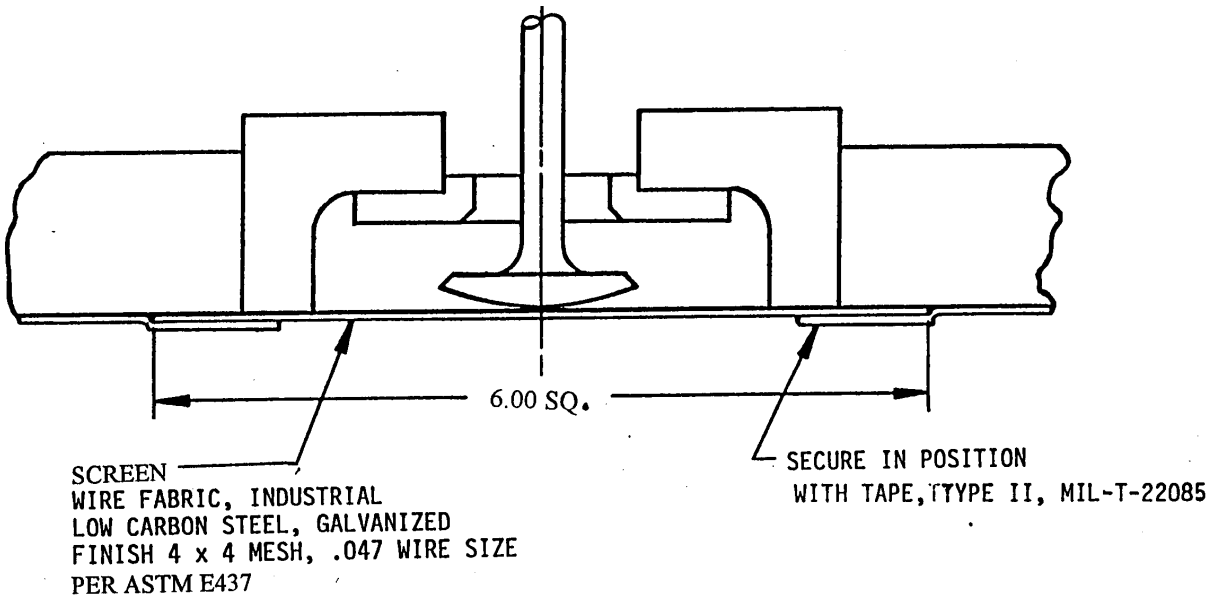


FIGURE 43. Installation drivers compartment drain valve screen.

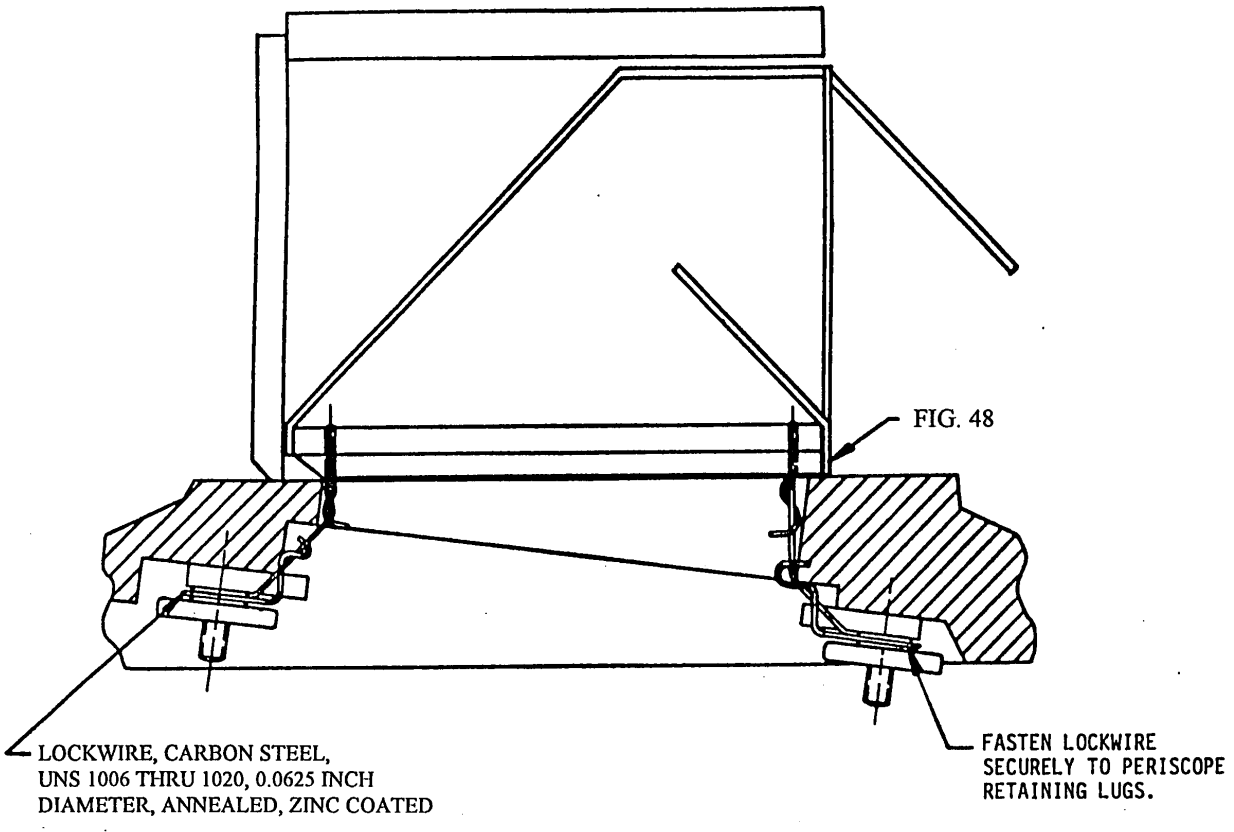


FIGURE 44. Installation of screen and baffle assembly in periscope openings.

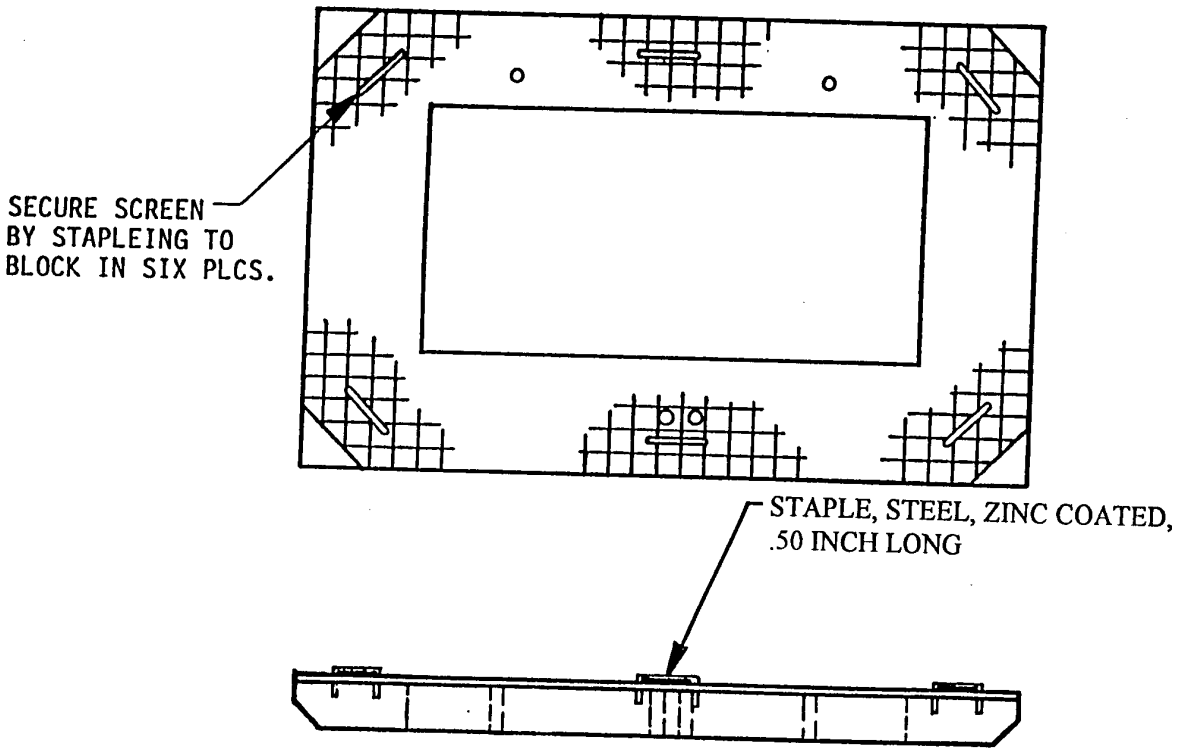
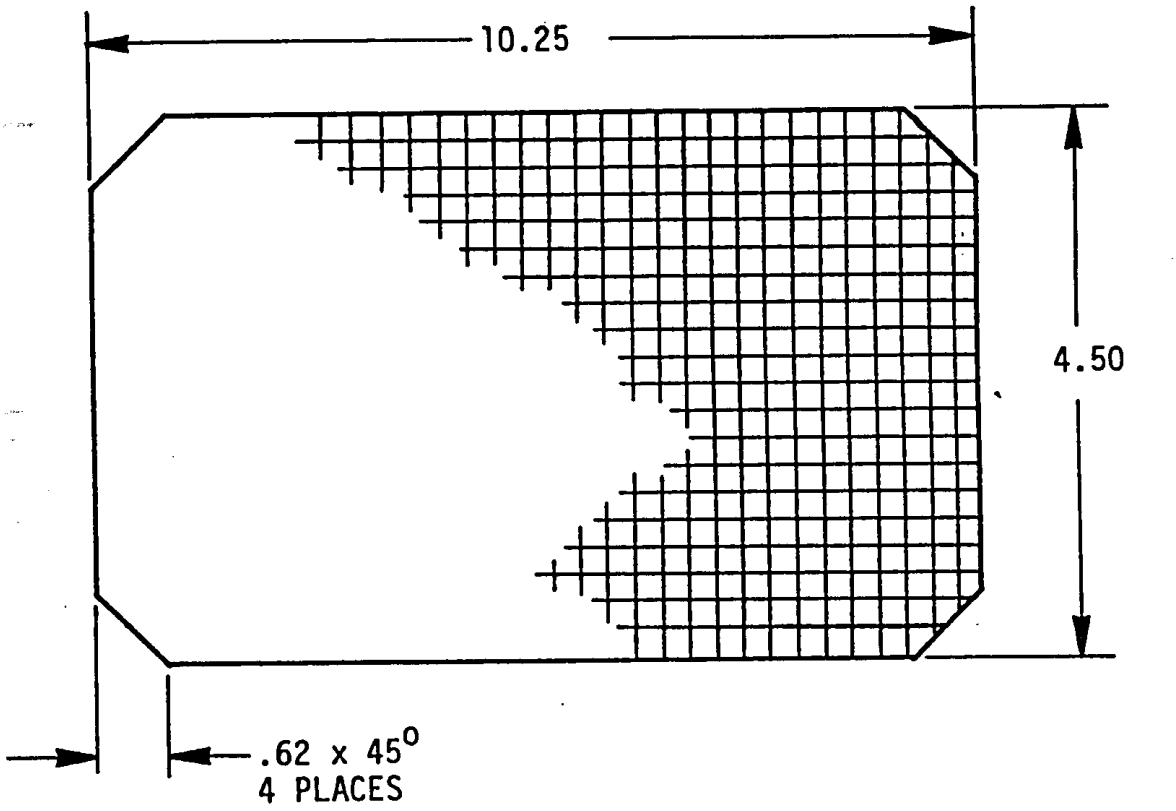


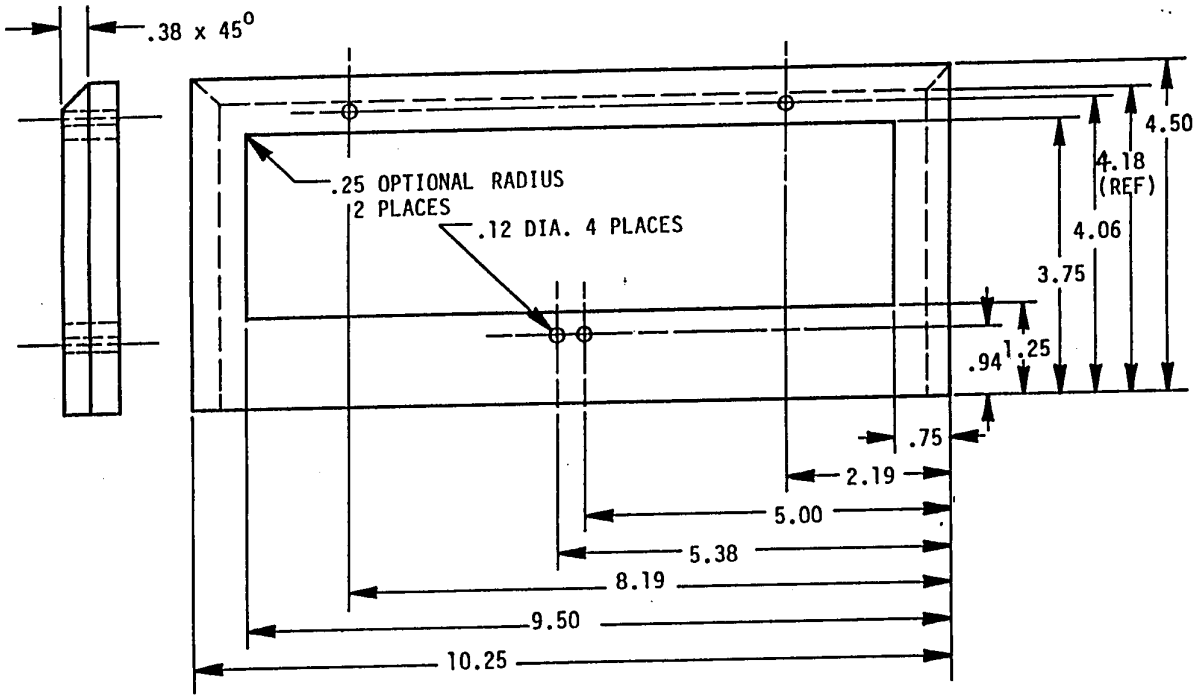
FIGURE 45. Screen assembly.



NOTE:

Material: Screen, wire fabric, industrial low carbon steel, galvanized, finish 4x4 mesh, 0.047 inch wire size, ASTM E437.

FIGURE 46. Screen.



NOTES:

1. Material: Plywood, exterior type, A-A-55057. 0.75 inch thick.
2. Final protective finish: Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 47. Block.

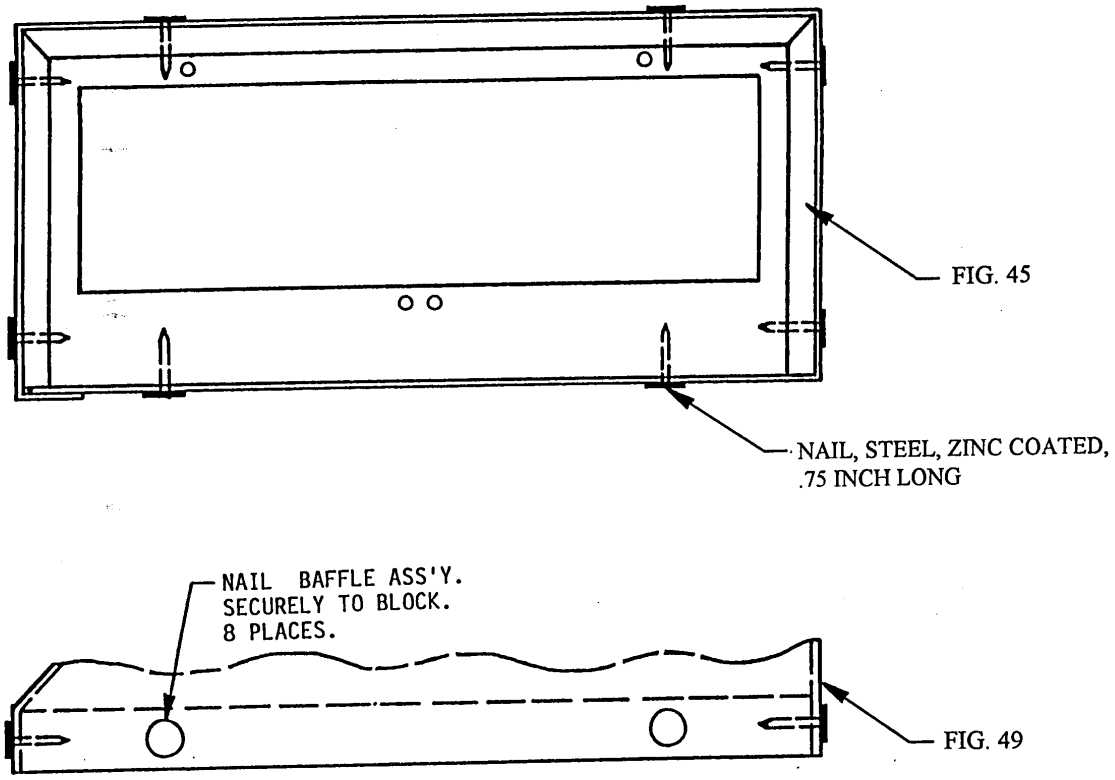
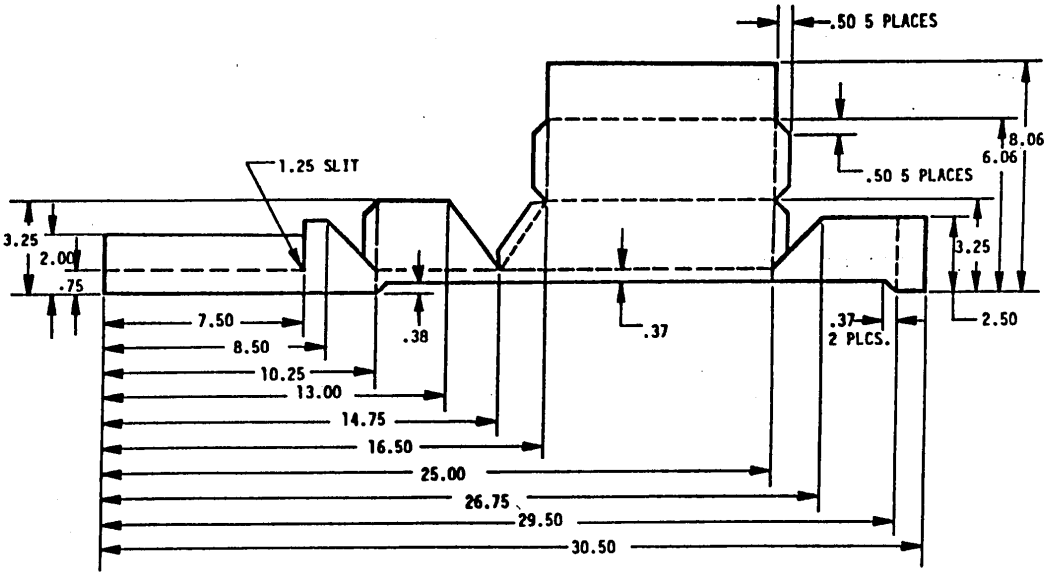


FIGURE 48. Screen and baffle assembly.



NOTES:

1. Material: Aluminum alloy 5052, QQ-A-250/8, temper H32 or H34.
2. Optional material: Aluminum alloy 6061, QQ-A-250/1, temper T4 or T6, 0.025 inch thick.

FIGURE 49. Baffle.

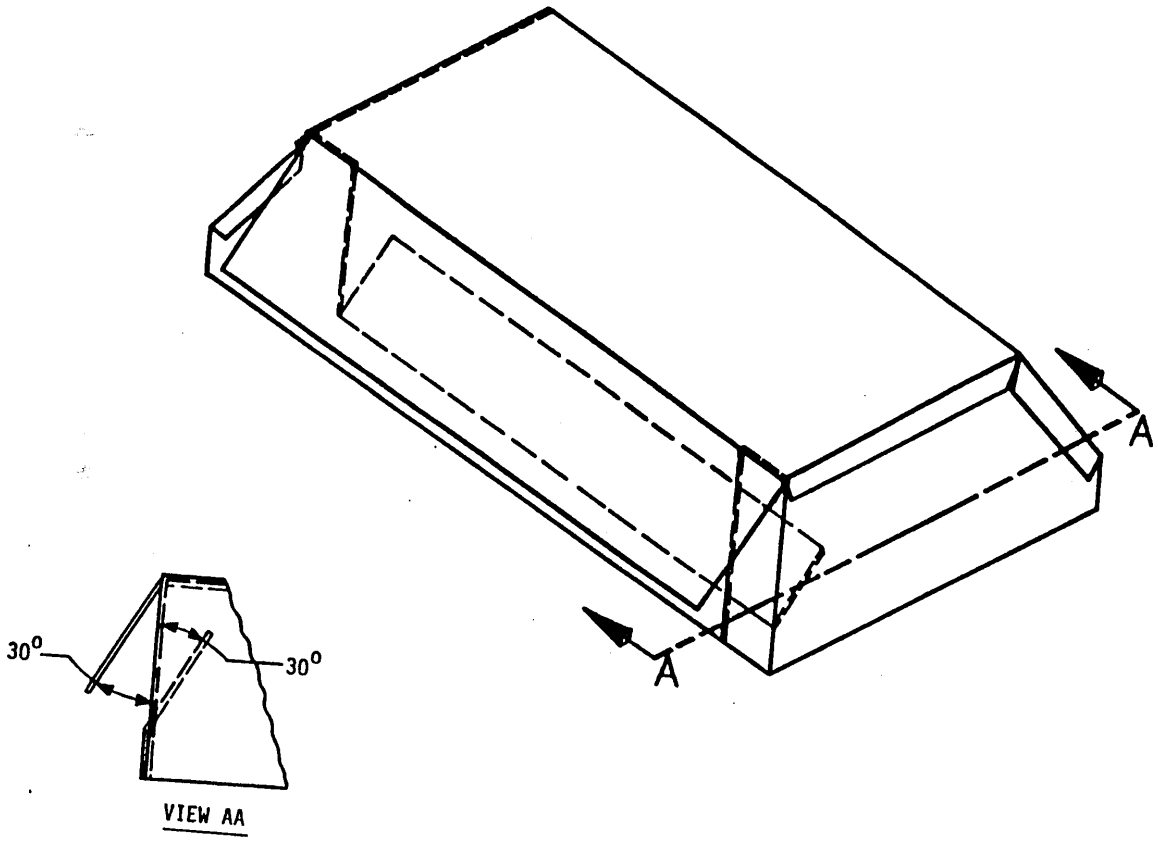
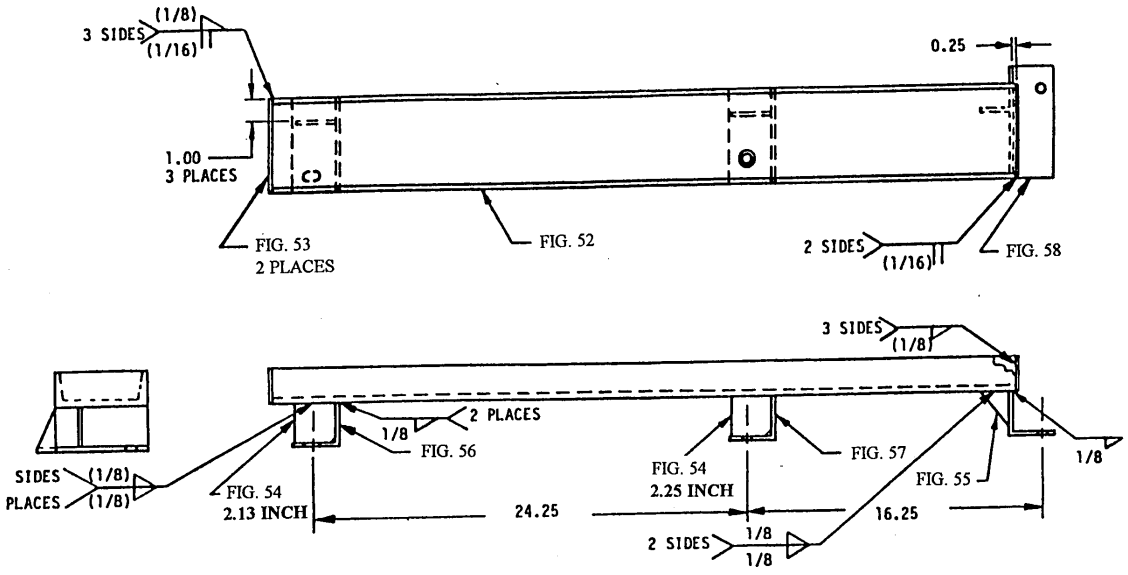


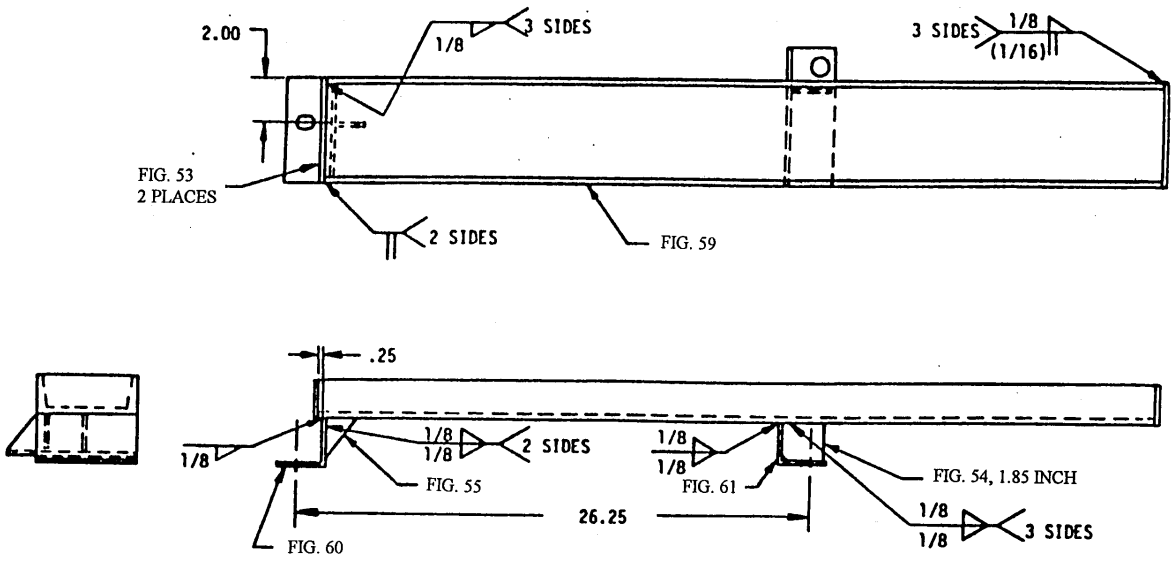
FIGURE 49. Baffle - Continued.



NOTES:

1. Weld in accordance with ANSI/AWS D1.1.
2. All weld sizes are minimum.
3. Final protective finish: Treat per type I or type III. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Tolerance: $\pm$ 0.02 inch.

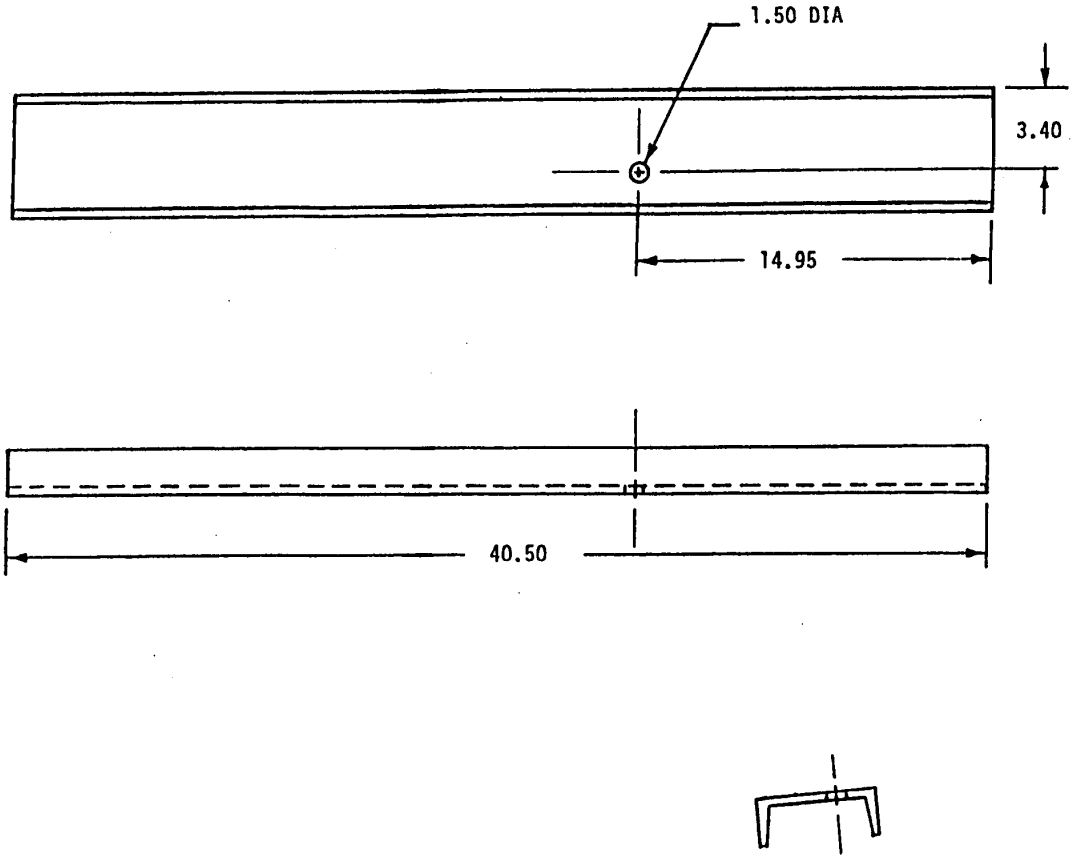
FIGURE 50. BII front rail assembly.



NOTES:

1. Weld in accordance with ANSI/AWS D1.1.
2. All weld sizes are minimum.
3. Final protective finish: Treat per type I or type III. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Tolerance: $\pm$ 0.02 inch.

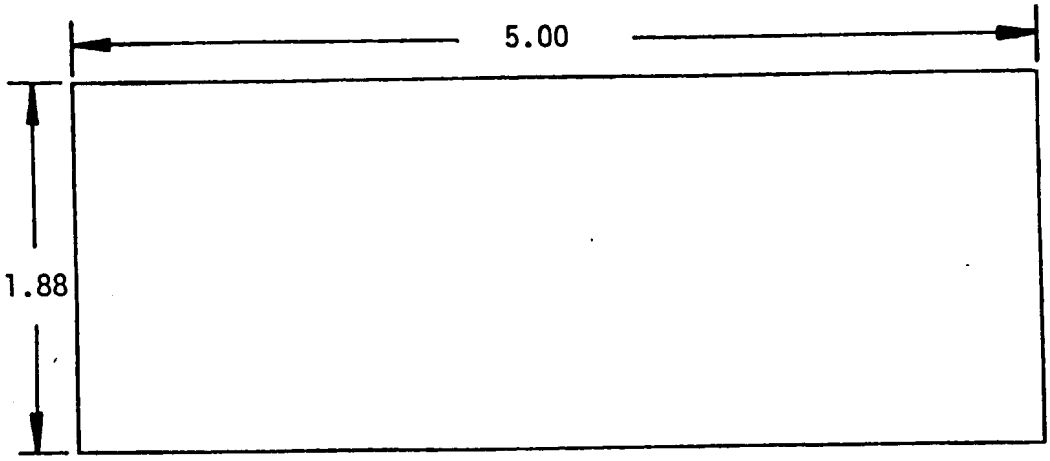
FIGURE 51. BII rear rail assembly.



NOTES:

1. Material: Steel C channel (structural), ASTM A36, 5.00 x 1.885 x 0.325 inch.
2. Remove all burrs and sharp edges.
3. Tolerance: ± 0.02 inch.

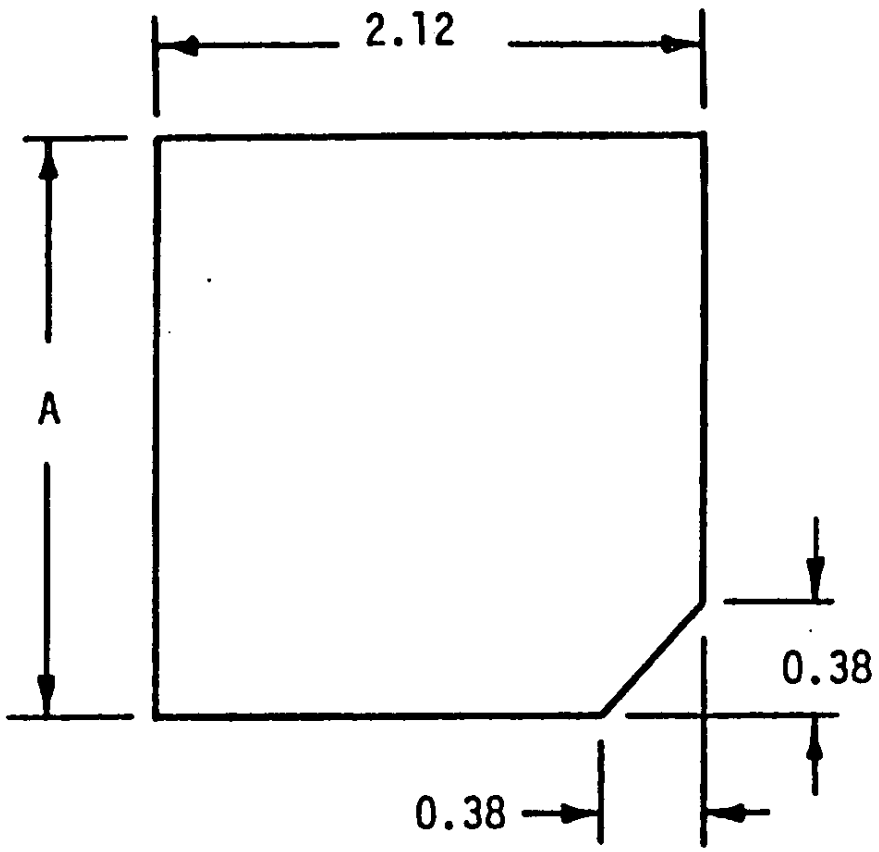
FIGURE 52. Front rail.



NOTES:

1. Material: Steel plate, ASTM A36, 0.25 inch thickness.
2. Remove all burrs and sharp edges.
3. Tolerance: $\pm$ 0.02 inch.

FIGURE 53. End plate.

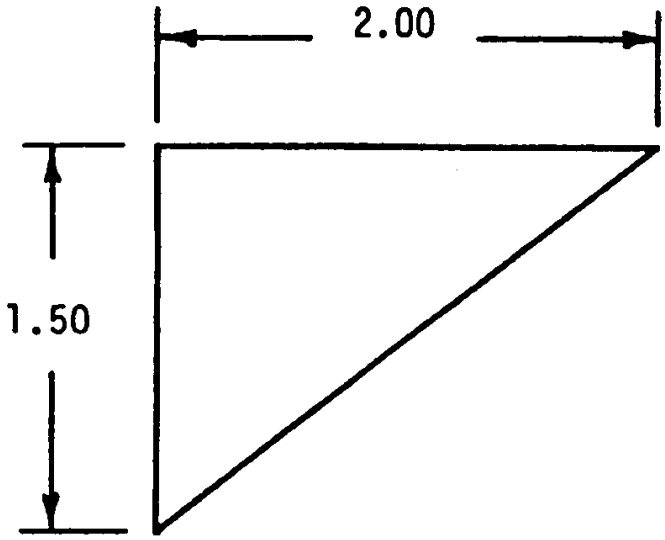


Dimension A	Quantity
2.13 inch	1
2.25 inch	1
1.85 inch	1

NOTES:

1. Material: Steel plate, ASTM A36, 0.25 inch thickness.
2. Remove all burrs and sharp edges.
3. Tolerance: ± 0.02 inch.

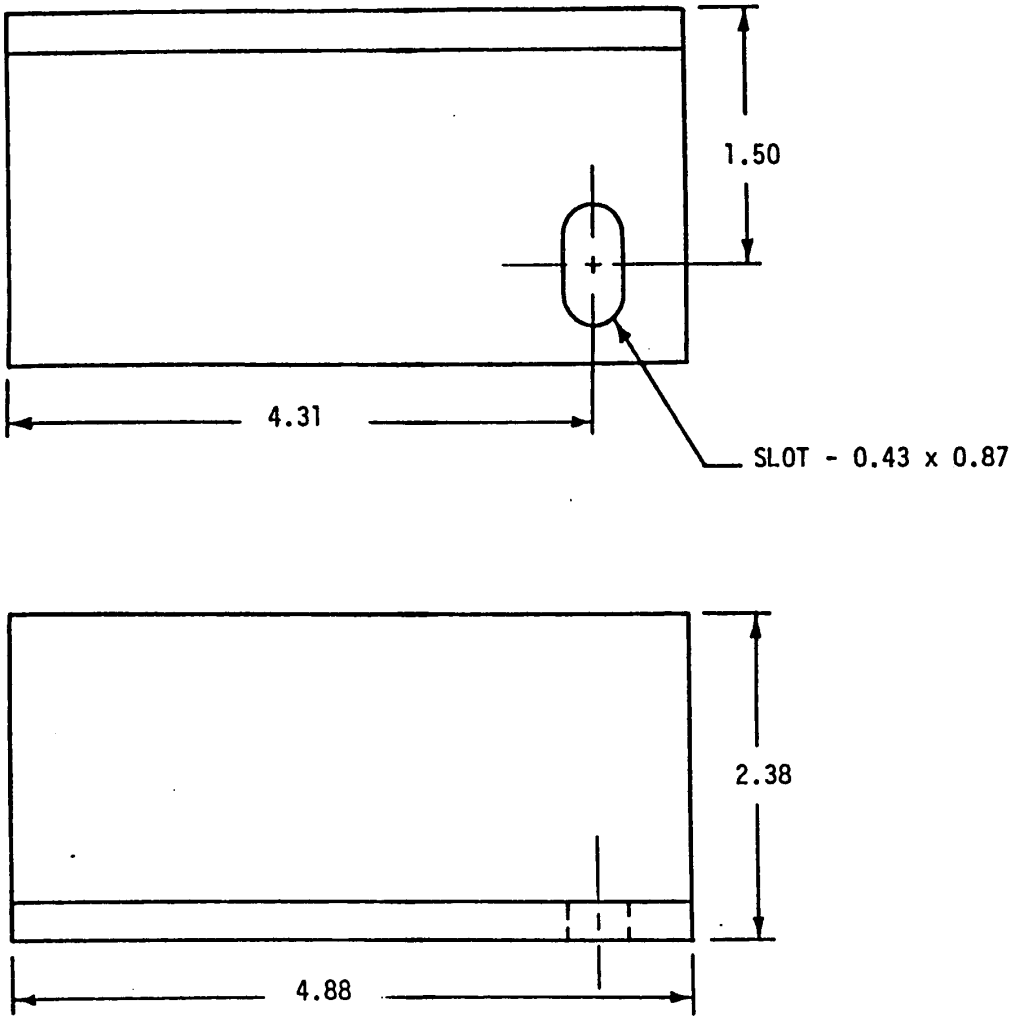
FIGURE 54. Leg brace.



NOTES:

1. Material: Steel plate, ASTM A36, 0.25 inch thickness.
2. Remove all burrs and sharp edges.
3. Tolerance: $\pm$ 0.02 inch.

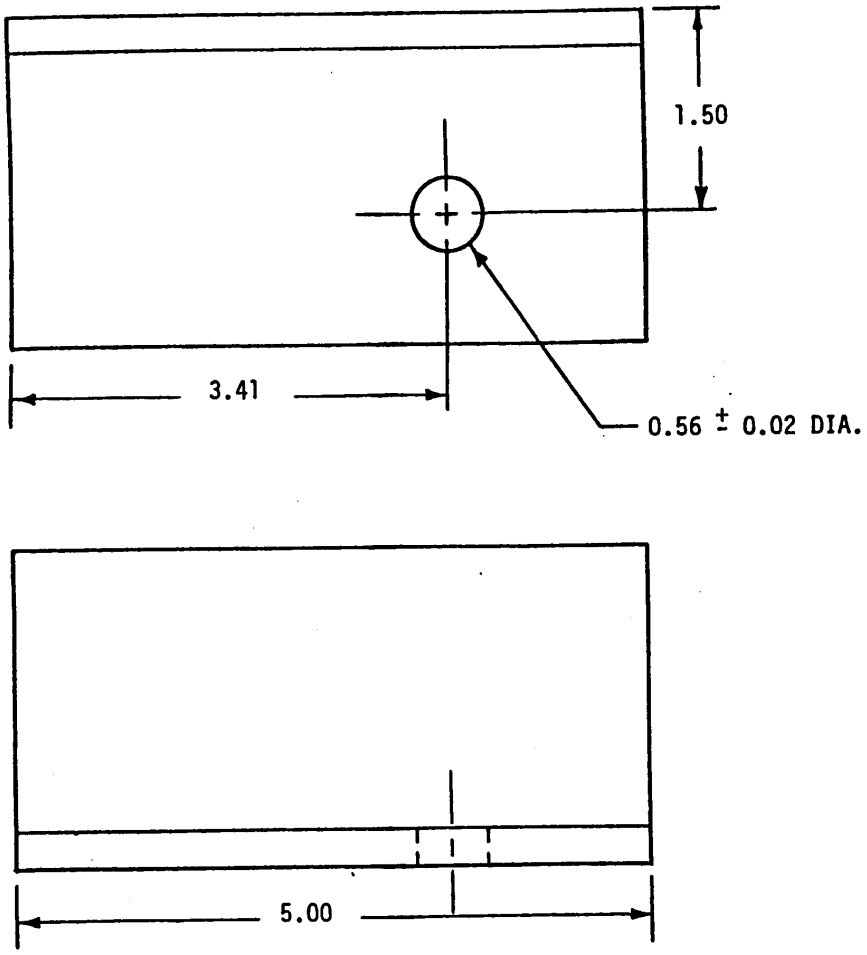
FIGURE 55. Gusset.



NOTES:

1. Material: Steel angle, bar size, ASTM A36, 2.50 x 2.50 x 0.25 inch, machine to specified height.
2. Remove all burrs and sharp edges.
3. Tolerance: $\pm$ 0.02 inch.

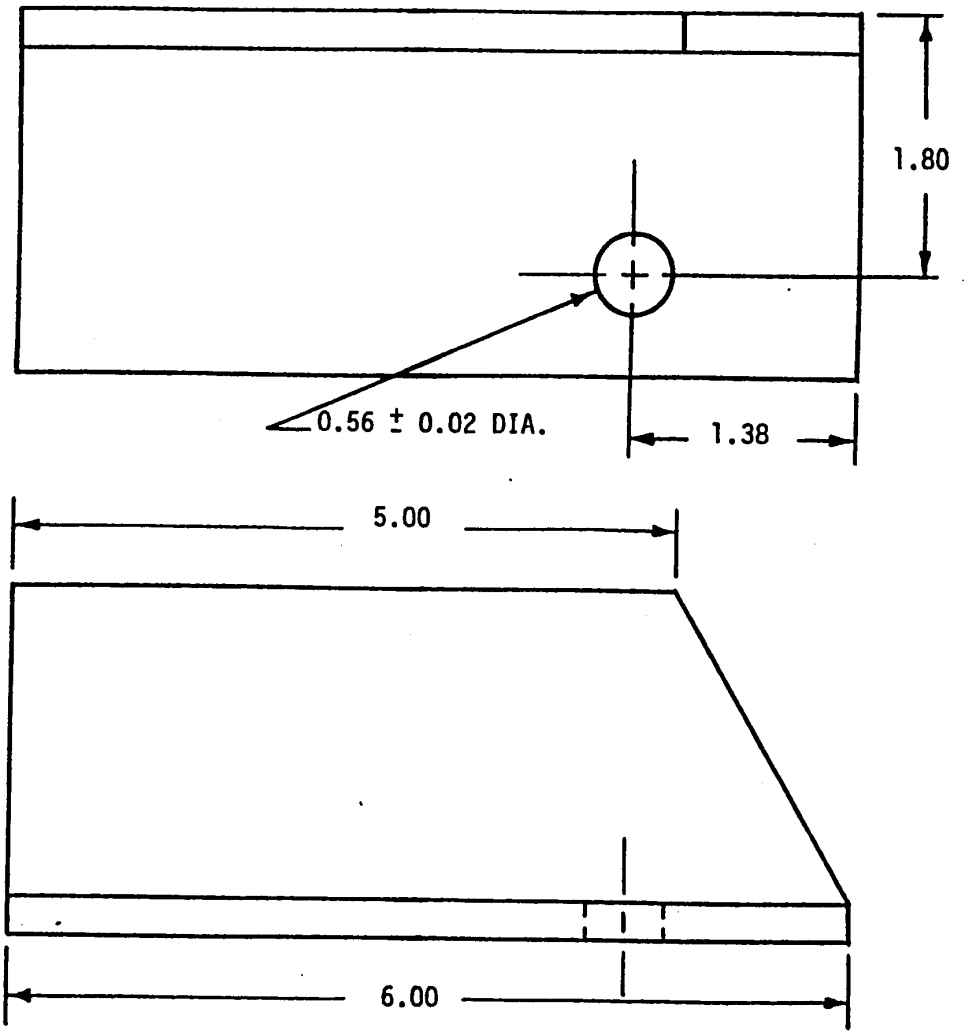
FIGURE 56. Front leg, part 1.



NOTES:

1. Material: Steel angle, bar size, ASTM A36, 2.50 x 2.50 x 0.25 inch.
2. Remove all burrs and sharp edges.
3. Tolerance: ± 0.02 inch.

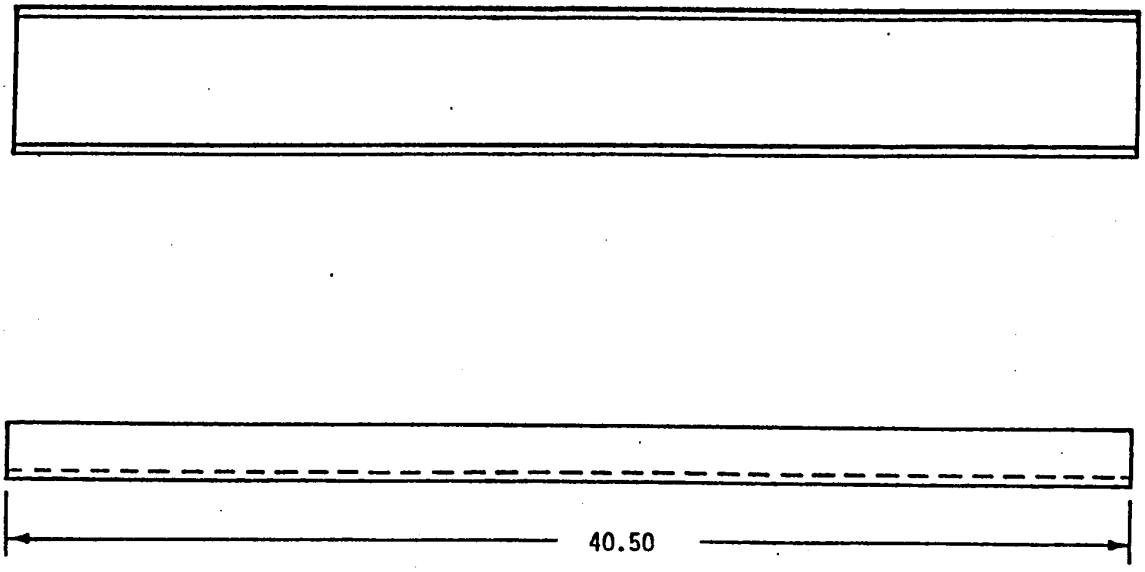
FIGURE 57. Front leg, part 2.



NOTES:

1. Material: Steel angle, bar size, ASTM A36, 2.50 x 2.50 x 0.25 inch.
2. Remove all burrs and sharp edges.
3. Tolerance: ± 0.02 inch.

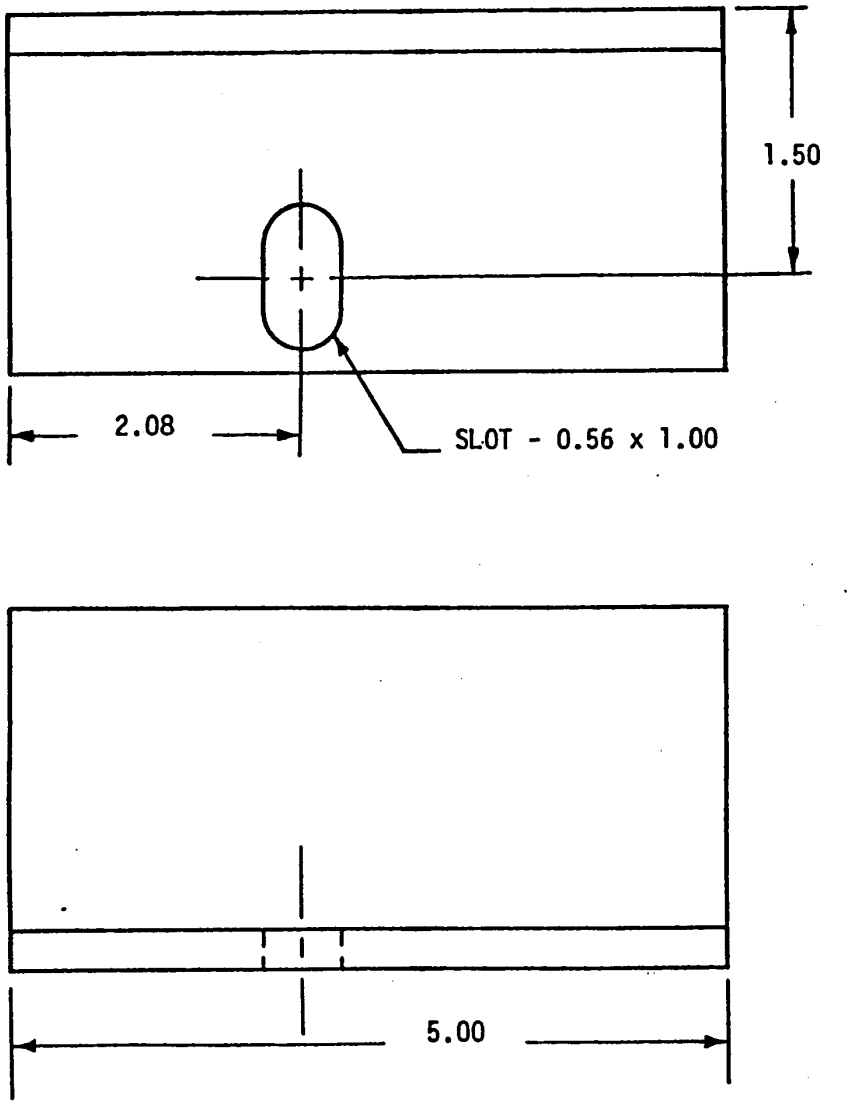
FIGURE 58. Front leg, part 3.



NOTES:

1. Material: Steel C channel (structural), ASTM A36, 5.00 x 1.885 x 0.325 inch.
2. Remove all burrs and sharp edges.
3. Tolerance: $\pm$ 0.02 inch.

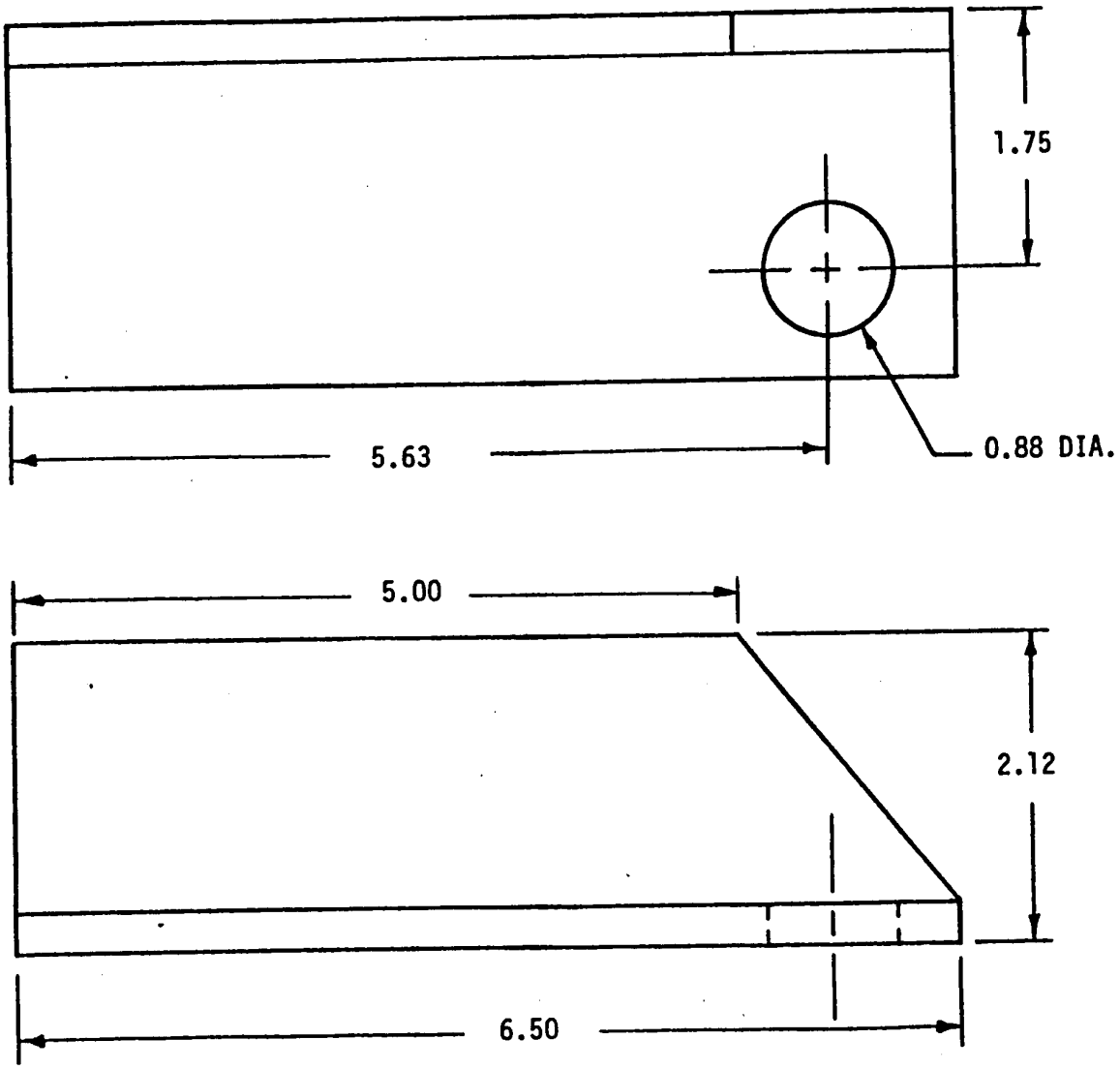
FIGURE 59. Rear rail.



NOTES:

1. Material: Steel angle, bar size, ASTM A36, 2.50 x 2.50 x 0.25 inch.
2. Remove all burrs and sharp edges.
3. Tolerance: ± 0.02 inch.

FIGURE 60. Rear leg, part 1.



NOTES:

1. Material: Steel angle, bar size, ASTM A36, 2.50 x 2.50 x 0.25 inch, machine to specified height.
2. Remove all burrs and sharp edges.
3. Tolerance: $\pm$ 0.02 inch.

FIGURE 61. Rear leg, part 2.

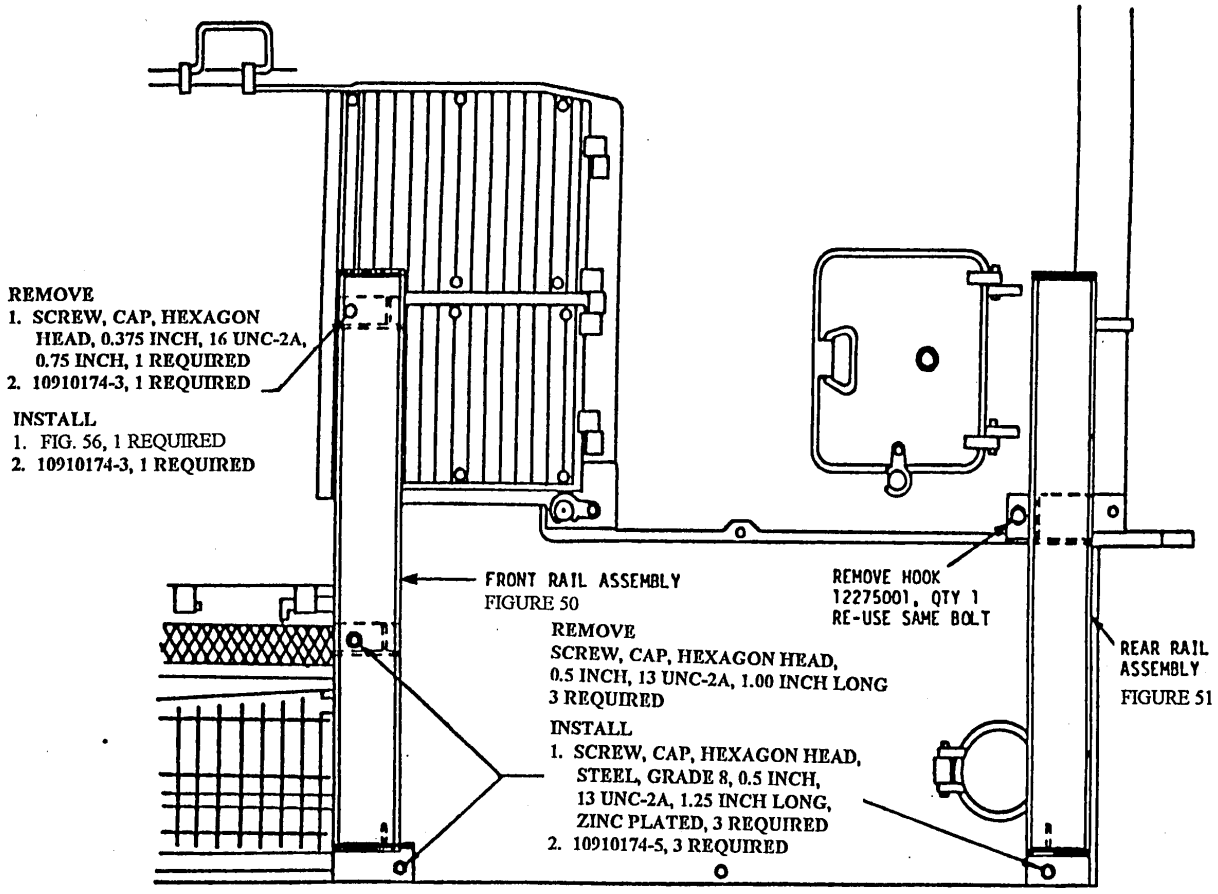


FIGURE 62. Cargo rack installation.

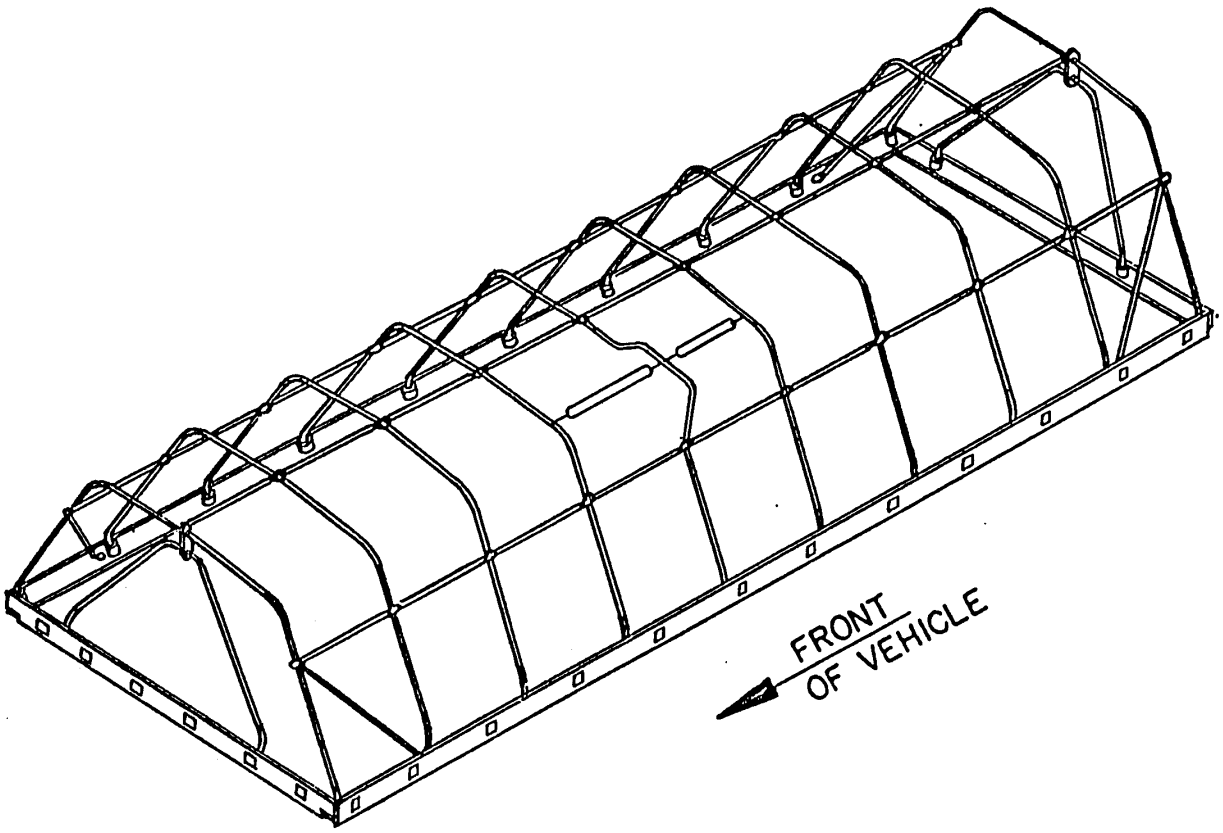


FIGURE 63. Frame assembly.

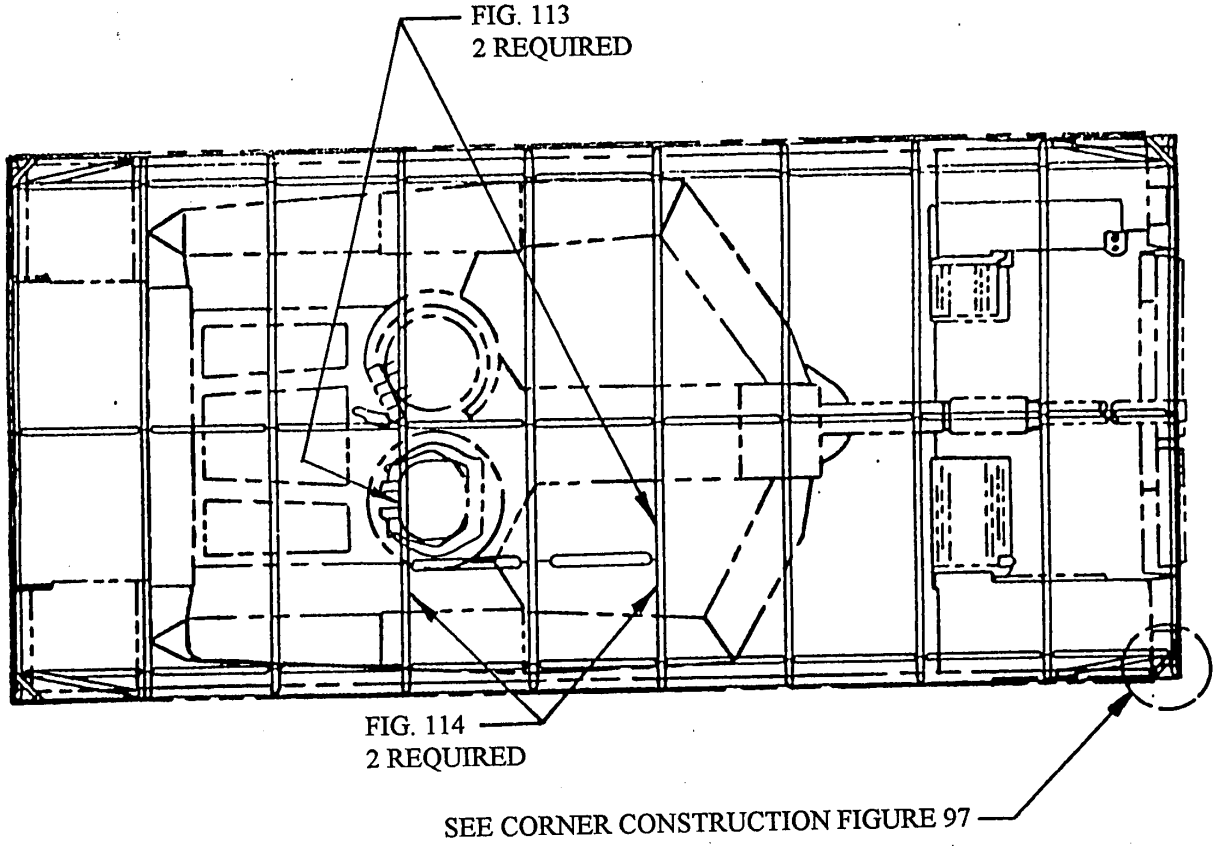


FIGURE 64. Plan view, frame.

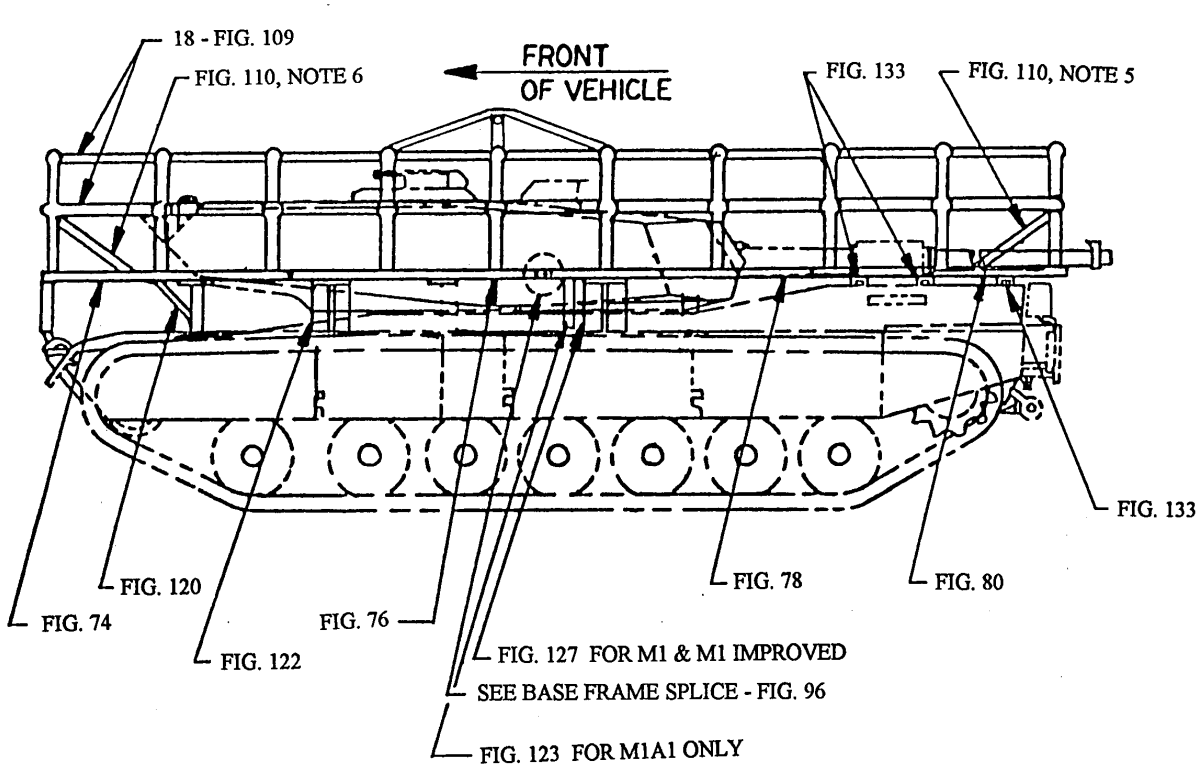


FIGURE 65. Left elevation, frame.

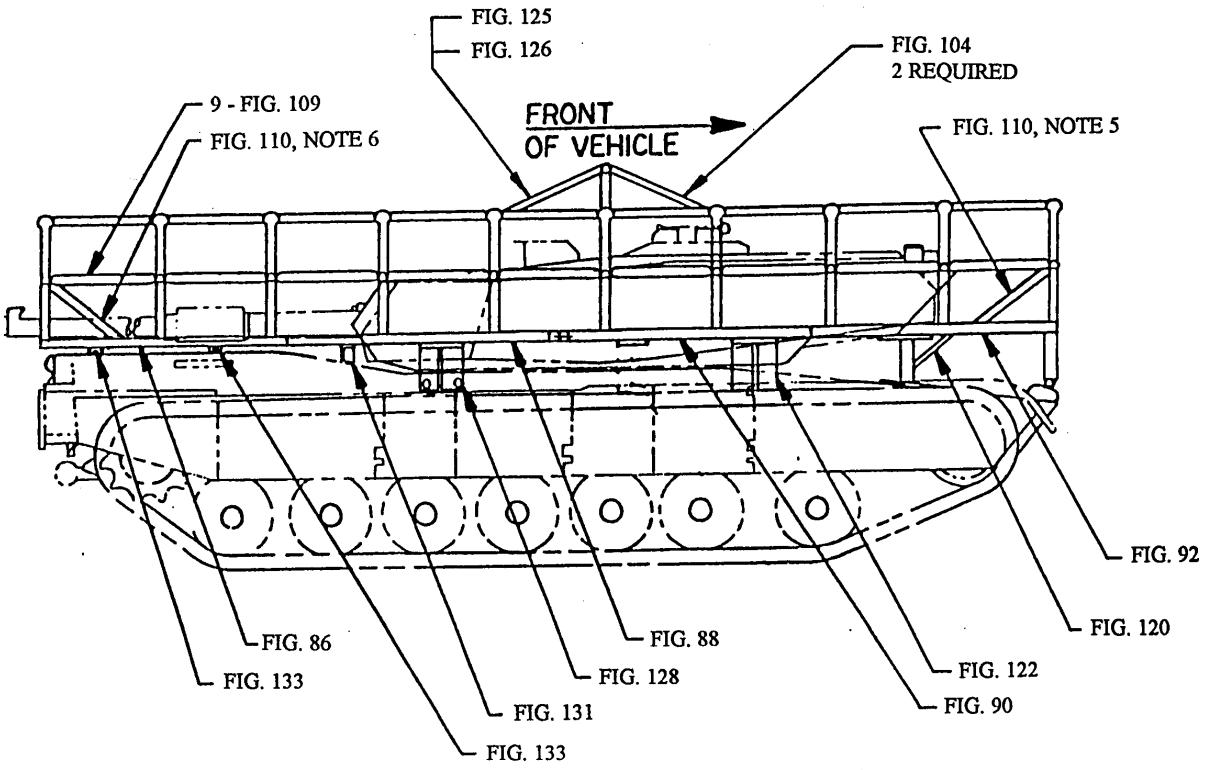


FIGURE 66. Right elevation, frame.

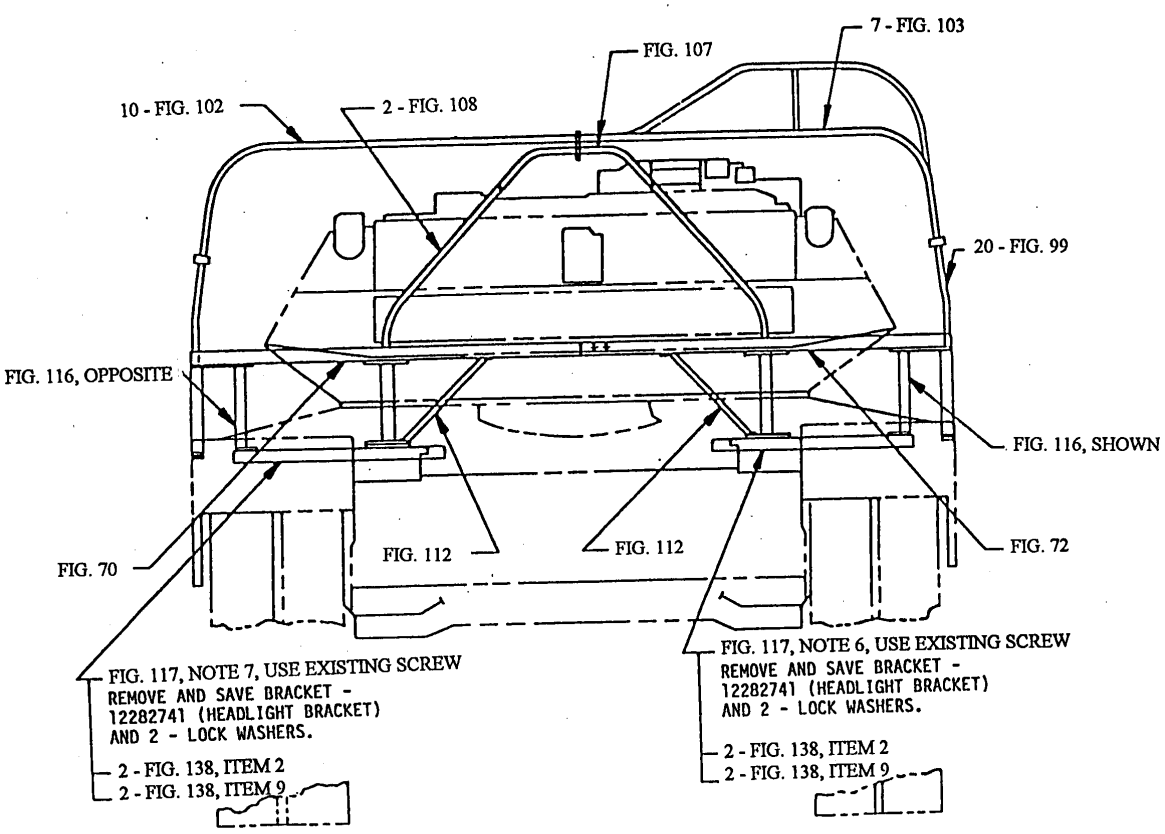


FIGURE 67. Front elevation.

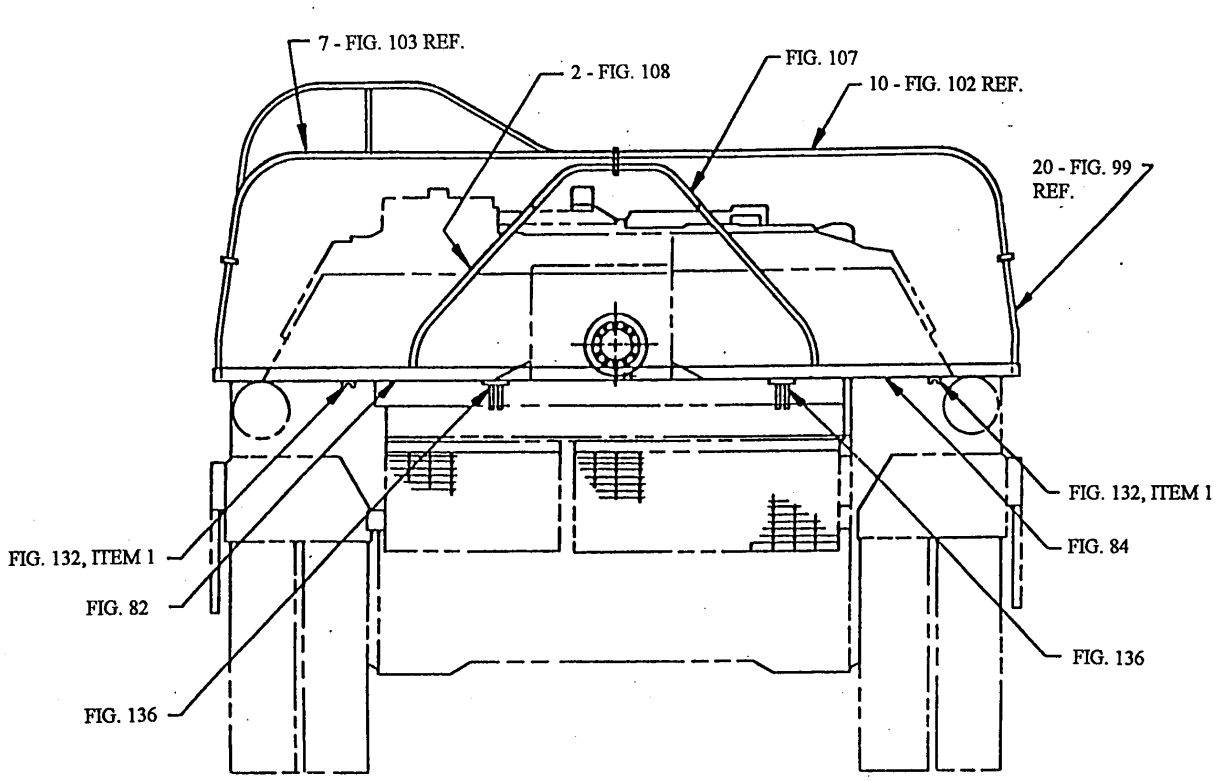
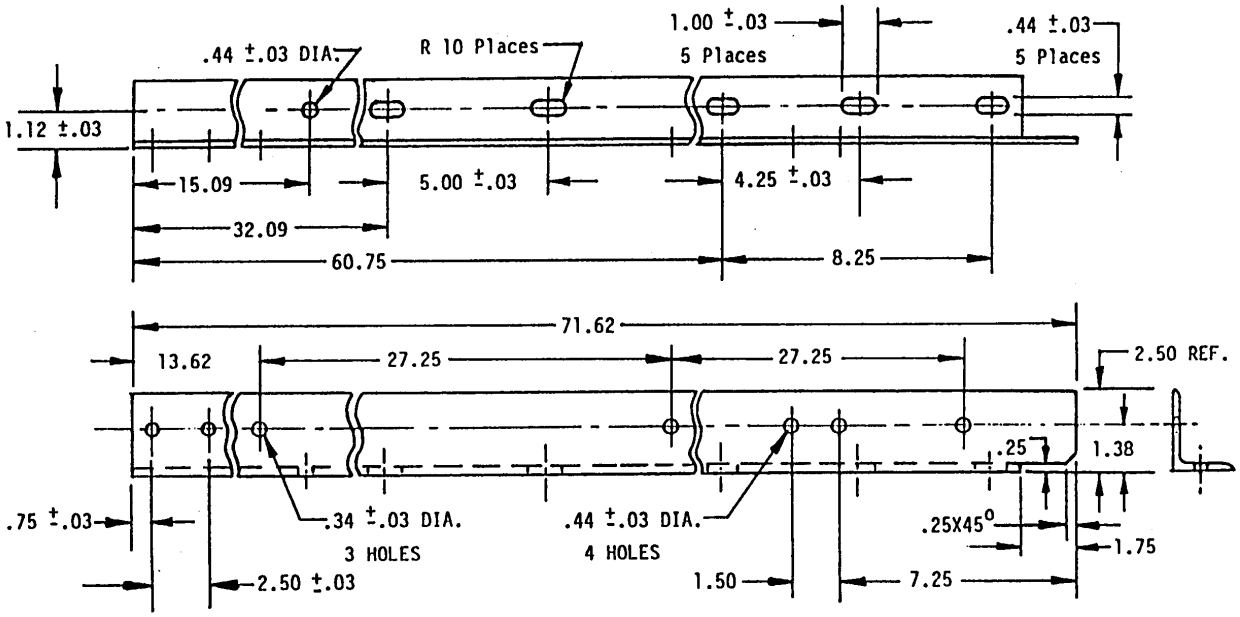


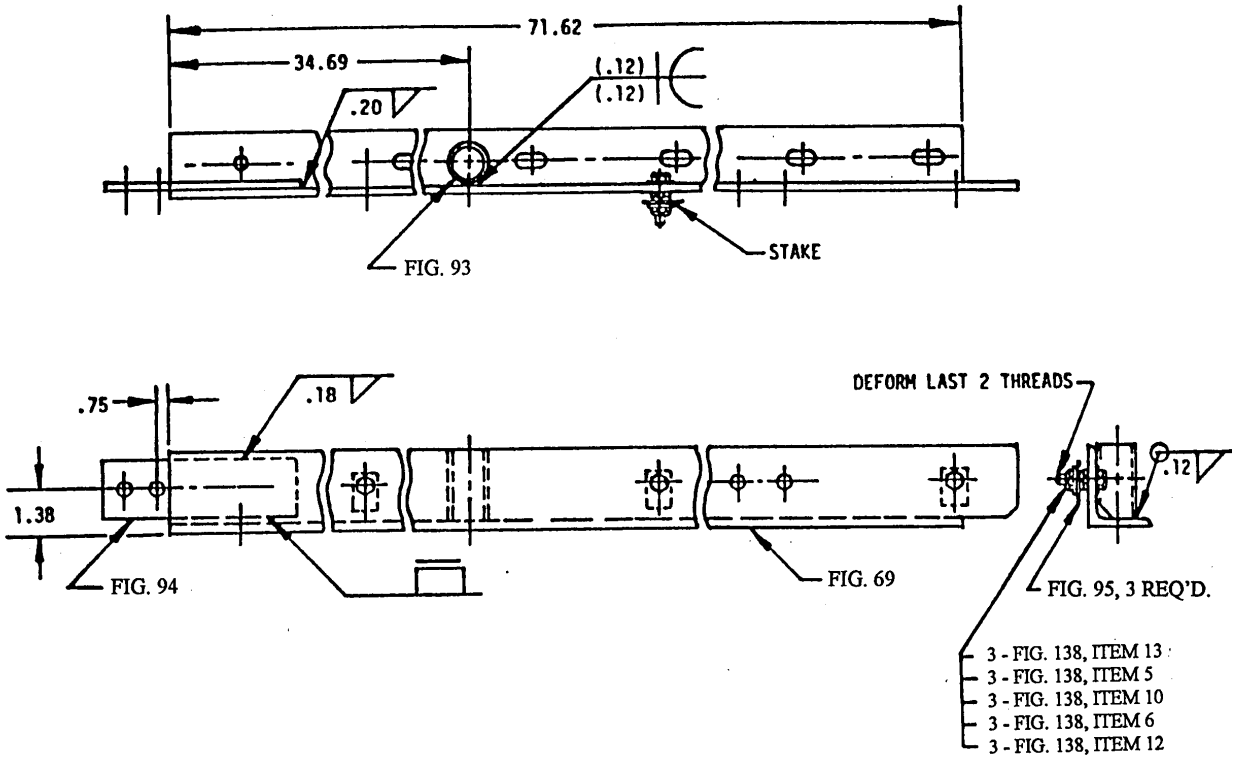
FIGURE 68. Rear elevation.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.00 x 0.25 inch.

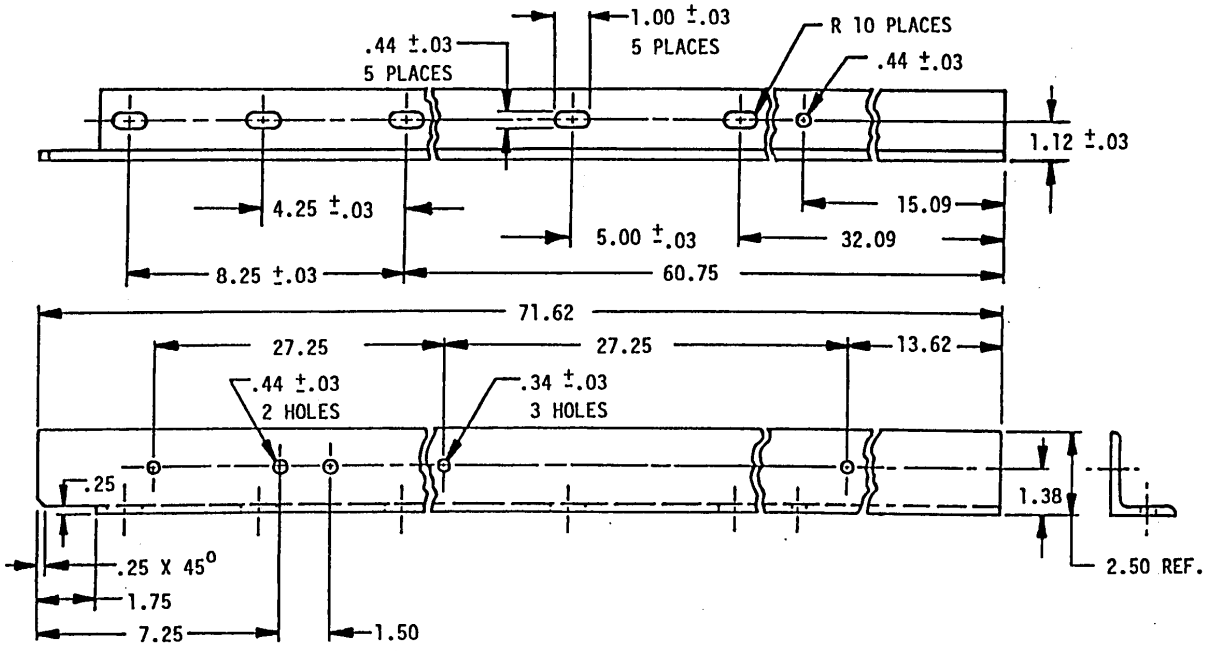
FIGURE 69. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

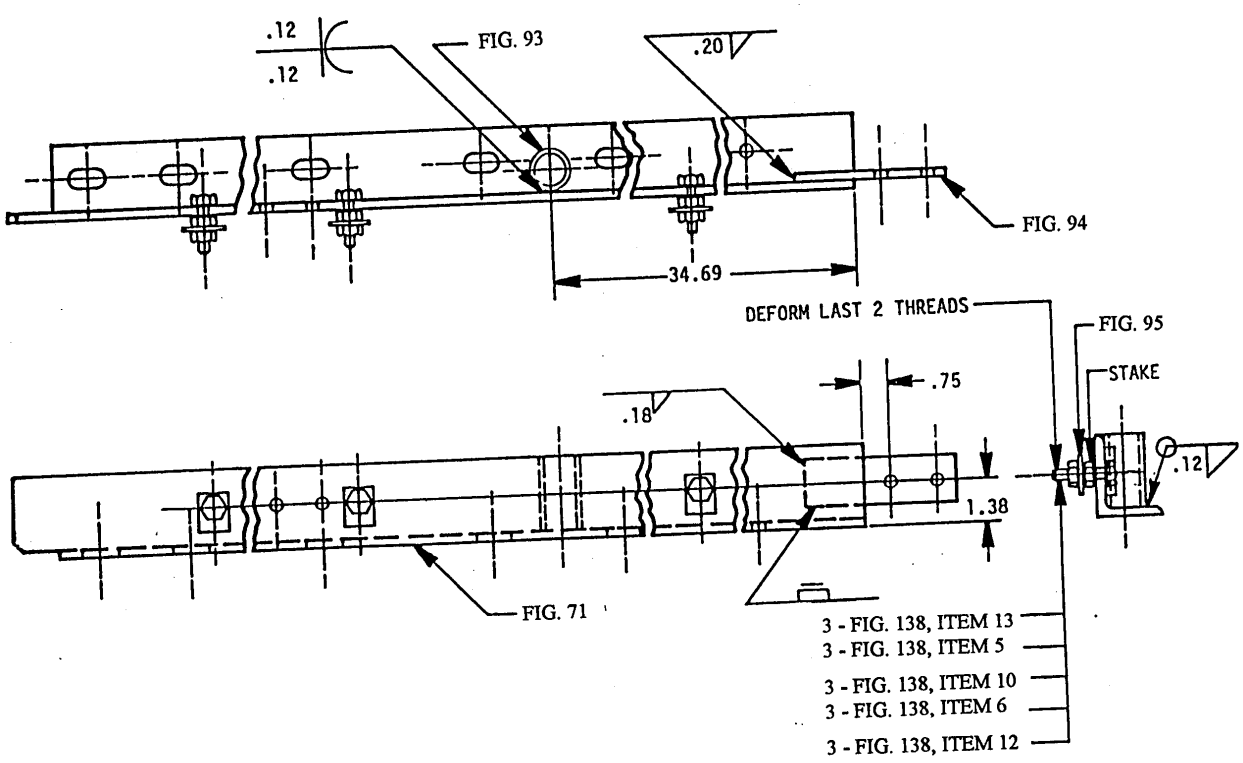
FIGURE 70. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.00 x 0.25 inch.

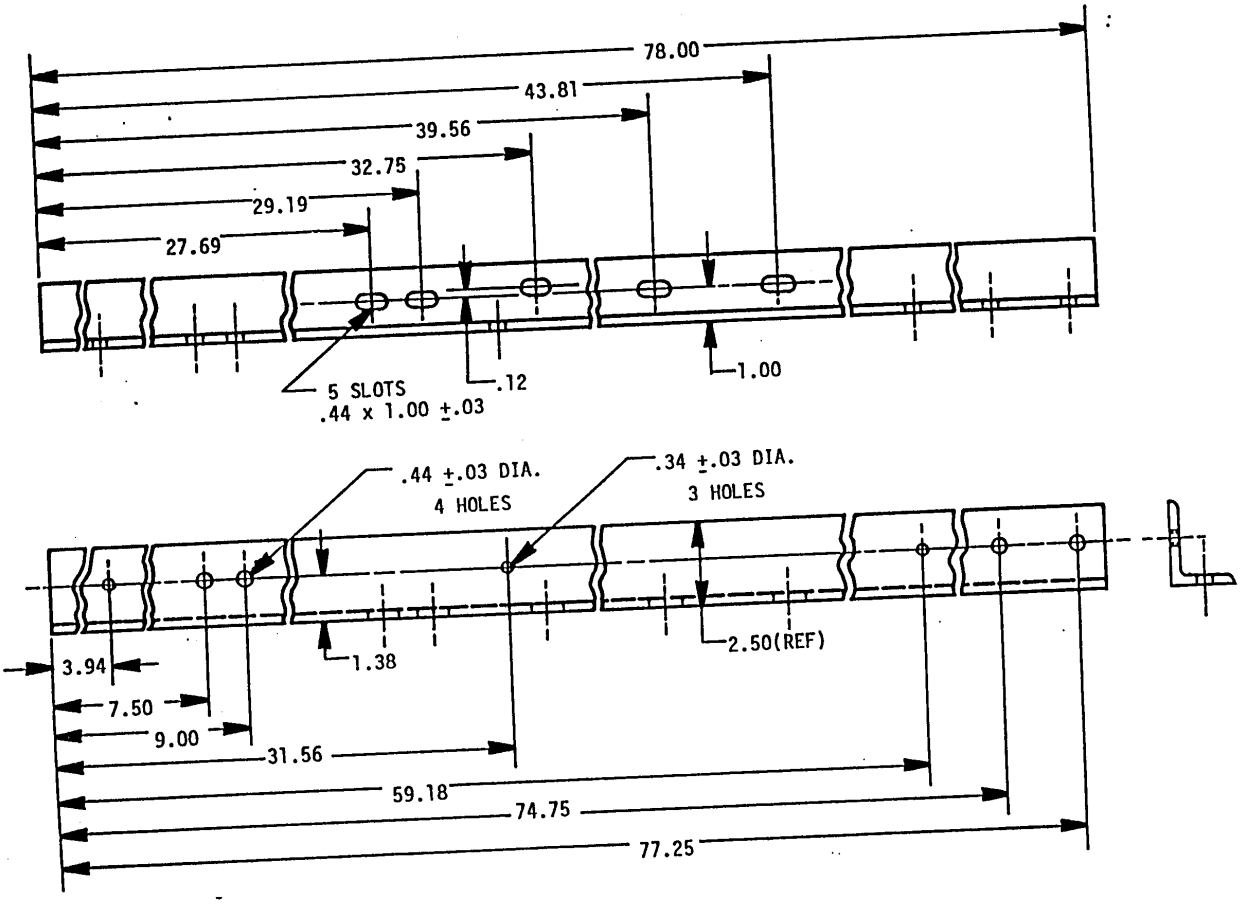
FIGURE 71. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

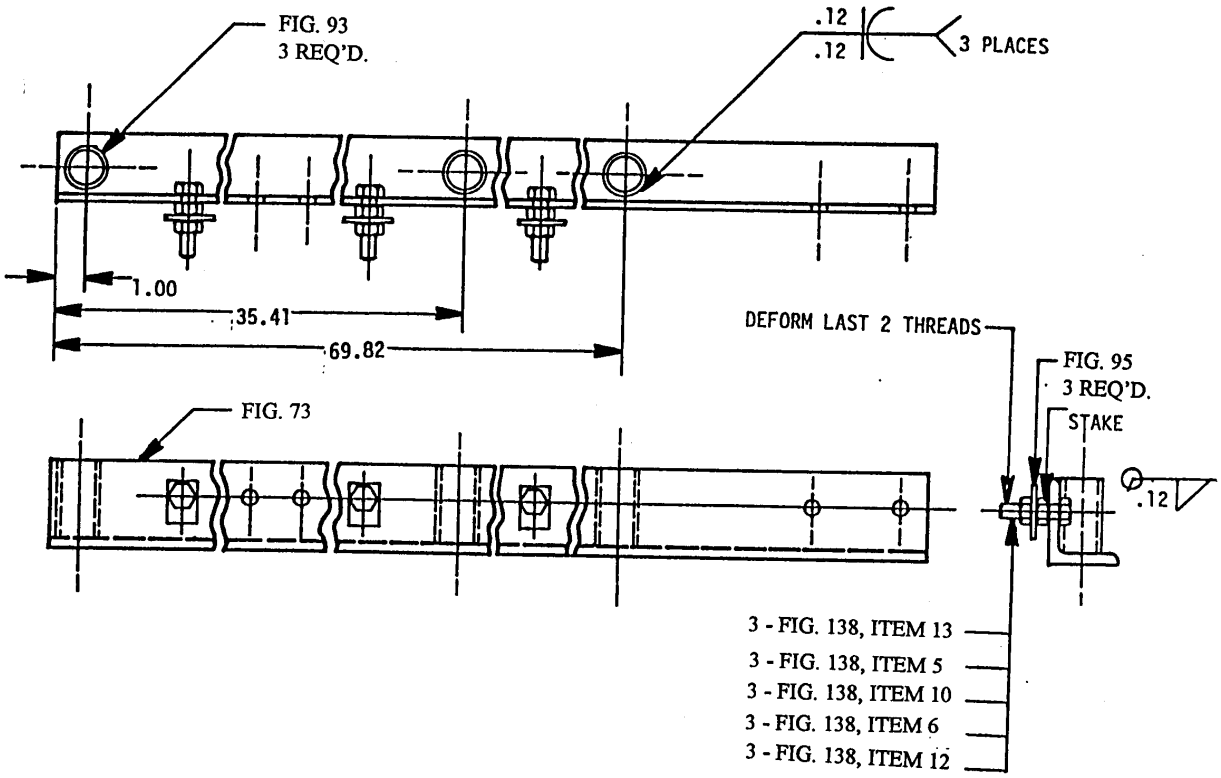
FIGURE 72. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.

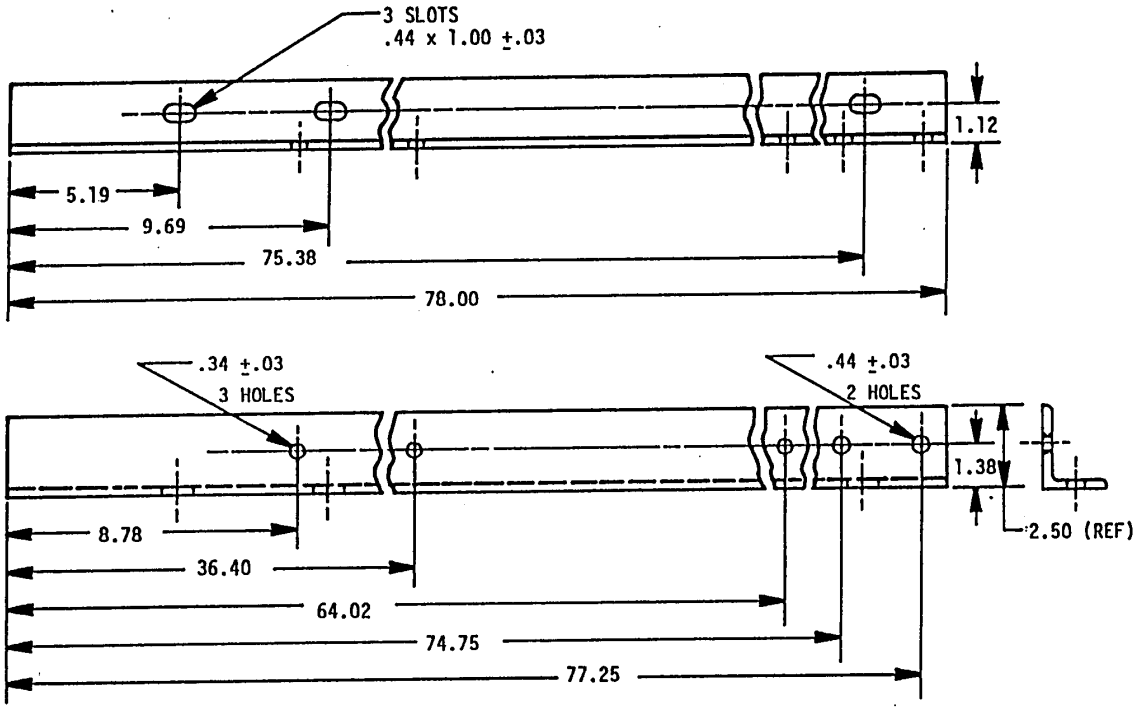
FIGURE 73. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

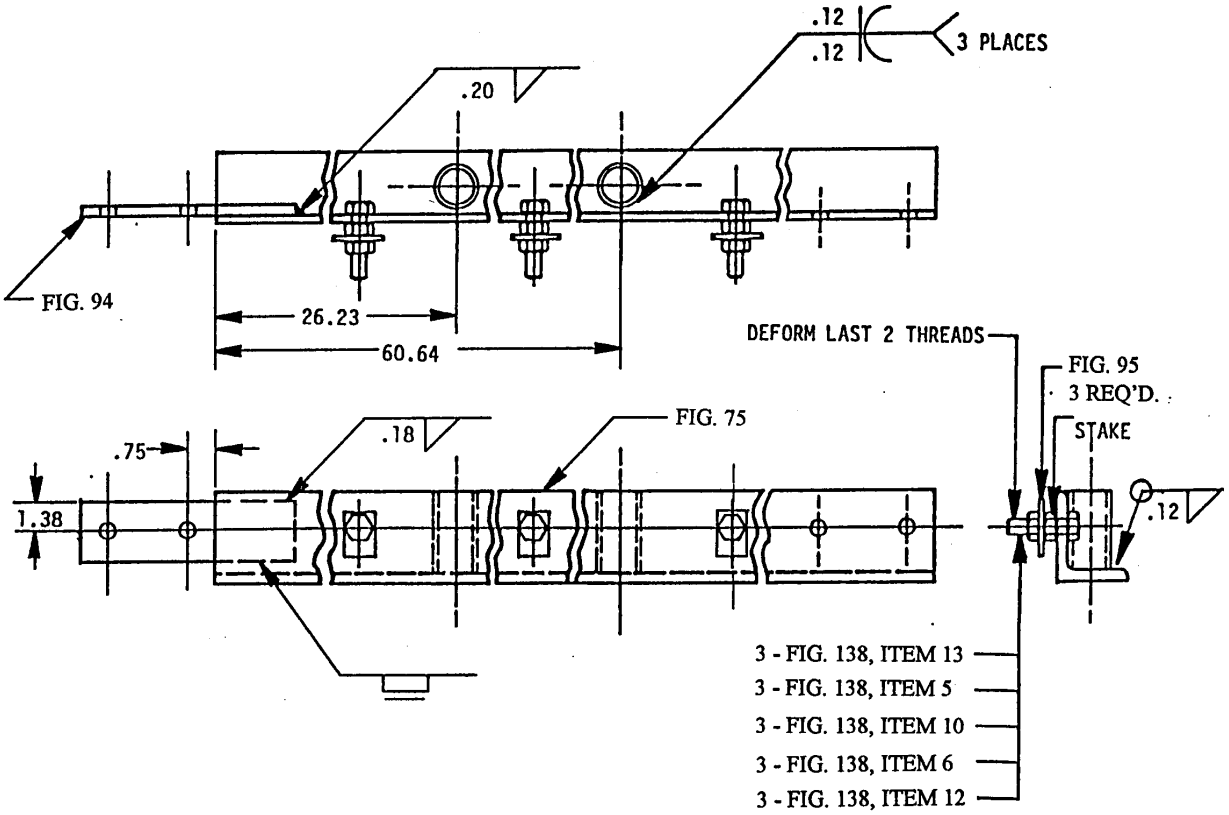
FIGURE 74. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.

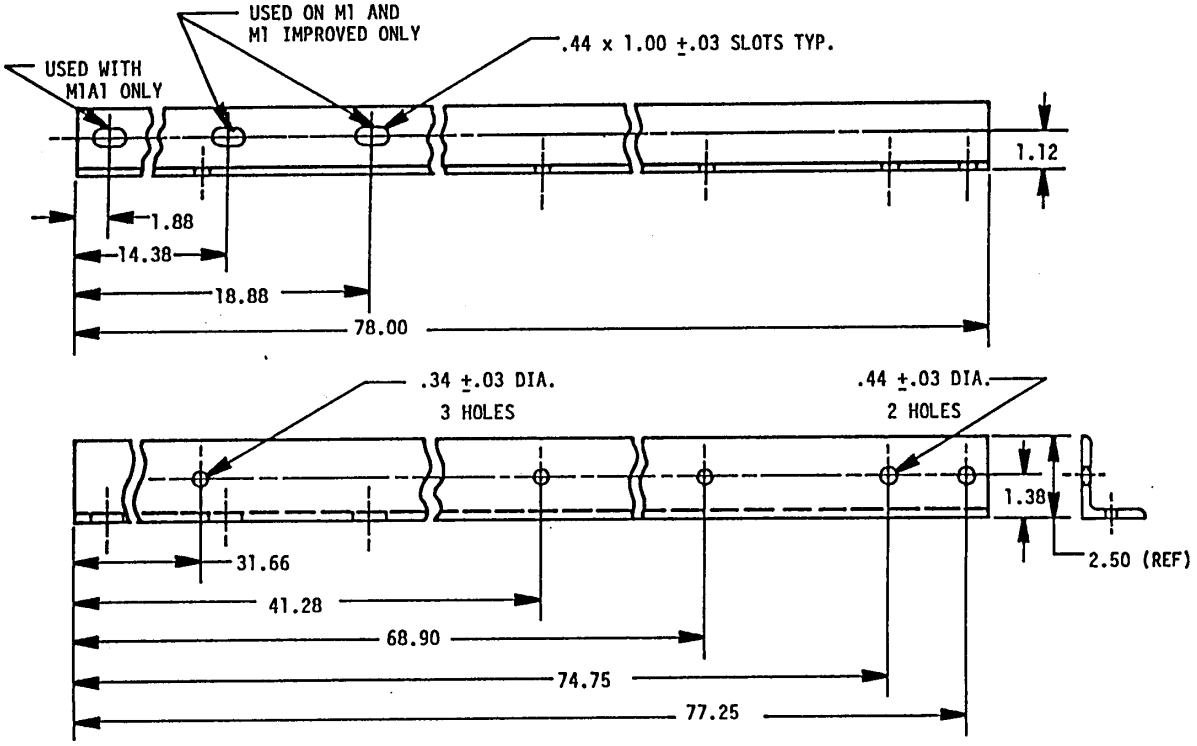
FIGURE 75. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

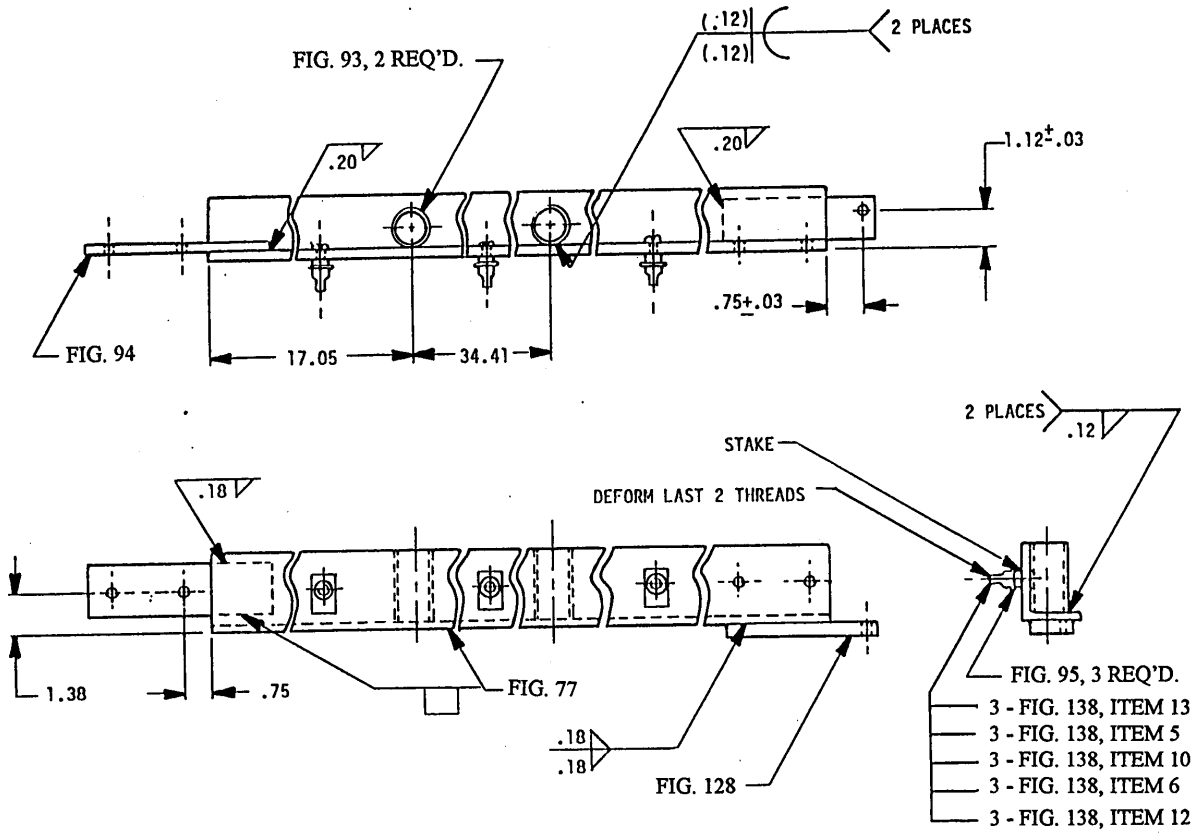
FIGURE 76. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.

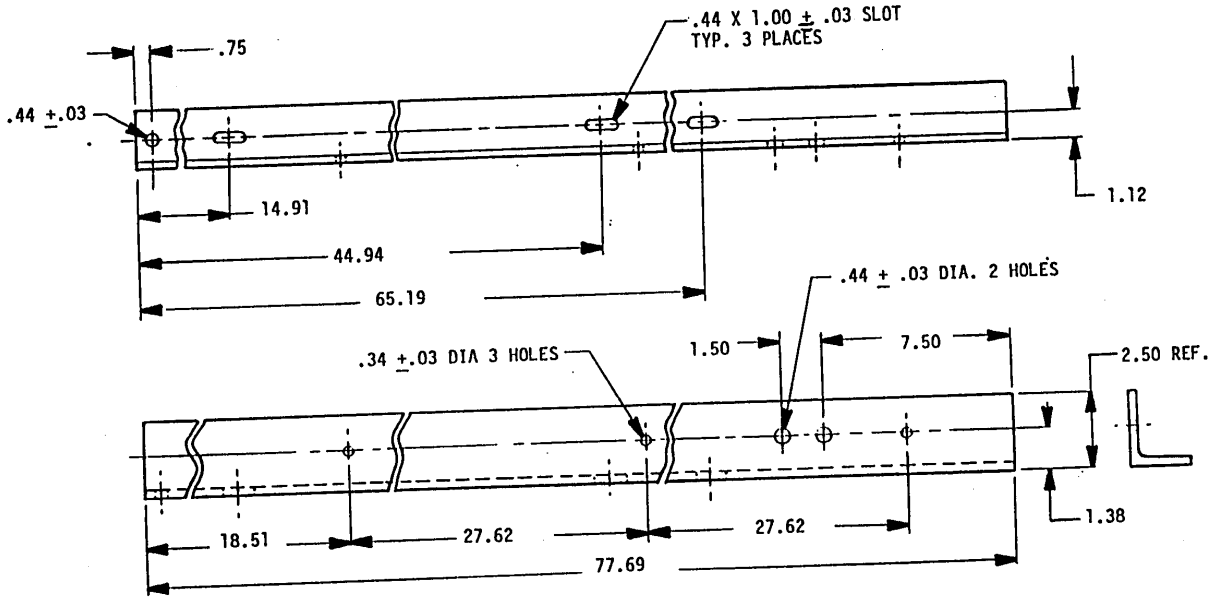
FIGURE 77. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

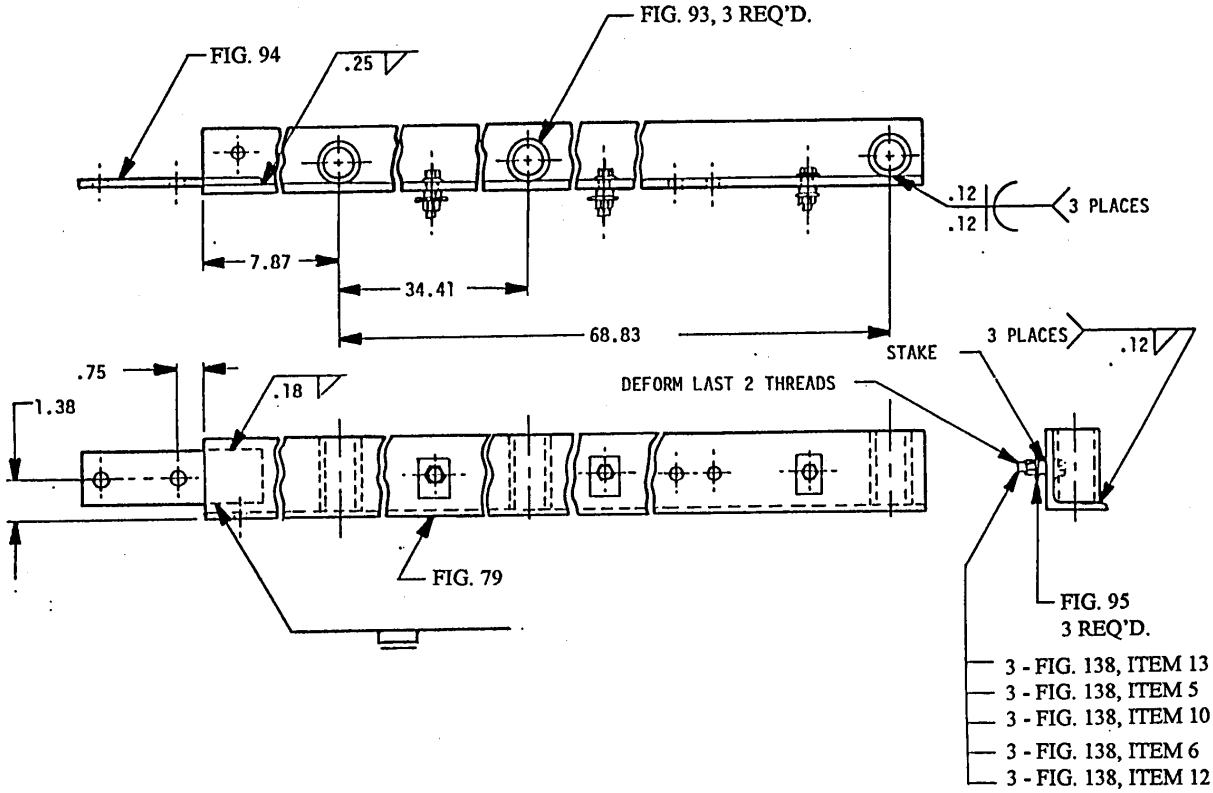
FIGURE 78. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.00 x 0.25 inch.

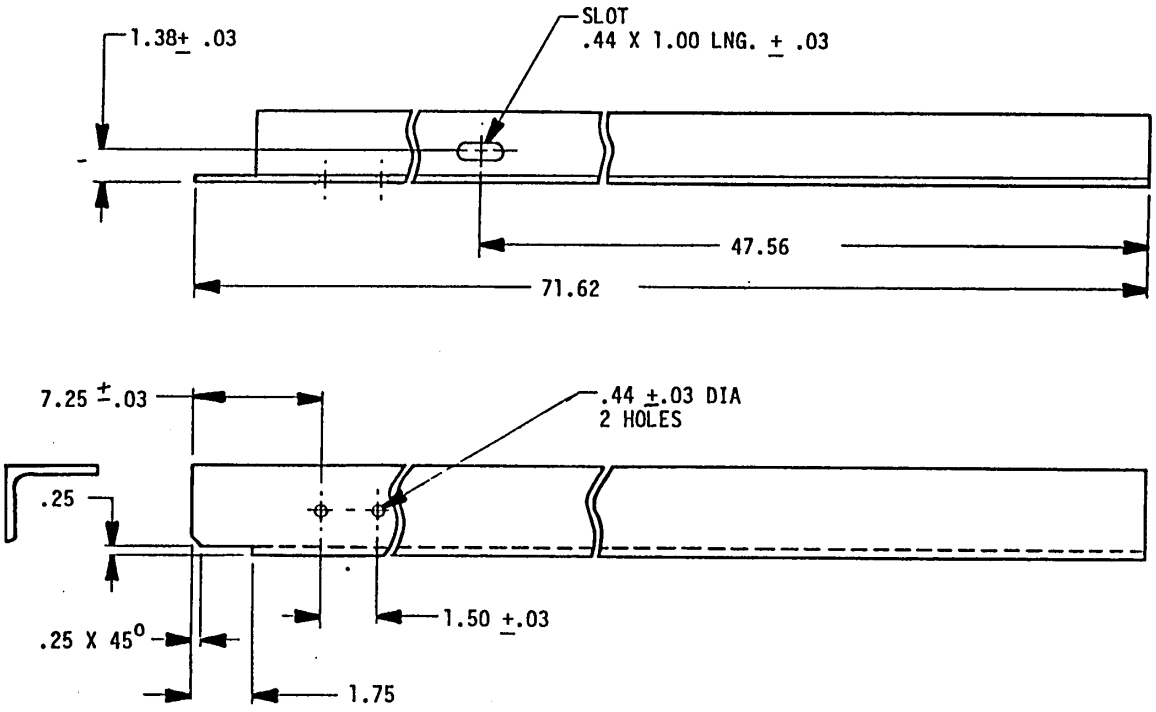
FIGURE 79. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

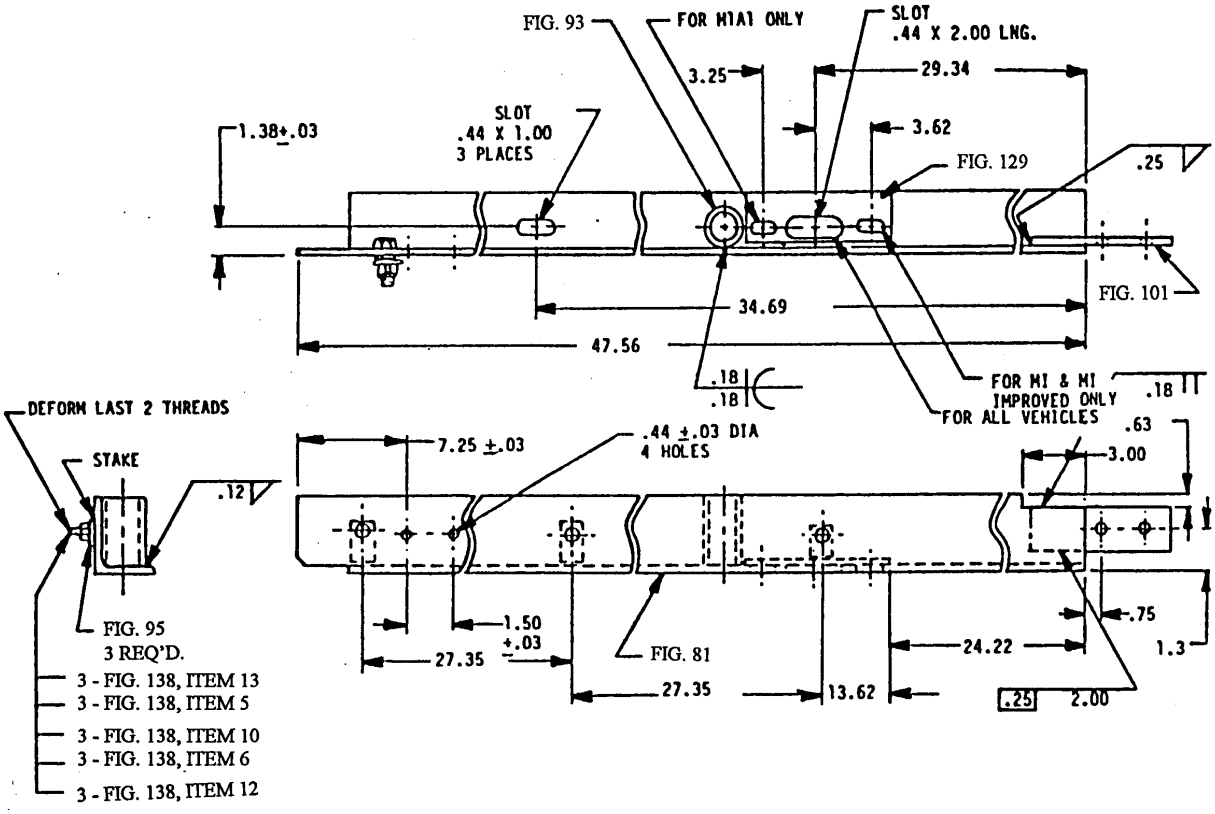
FIGURE 80. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.00 x 0.25 inch.

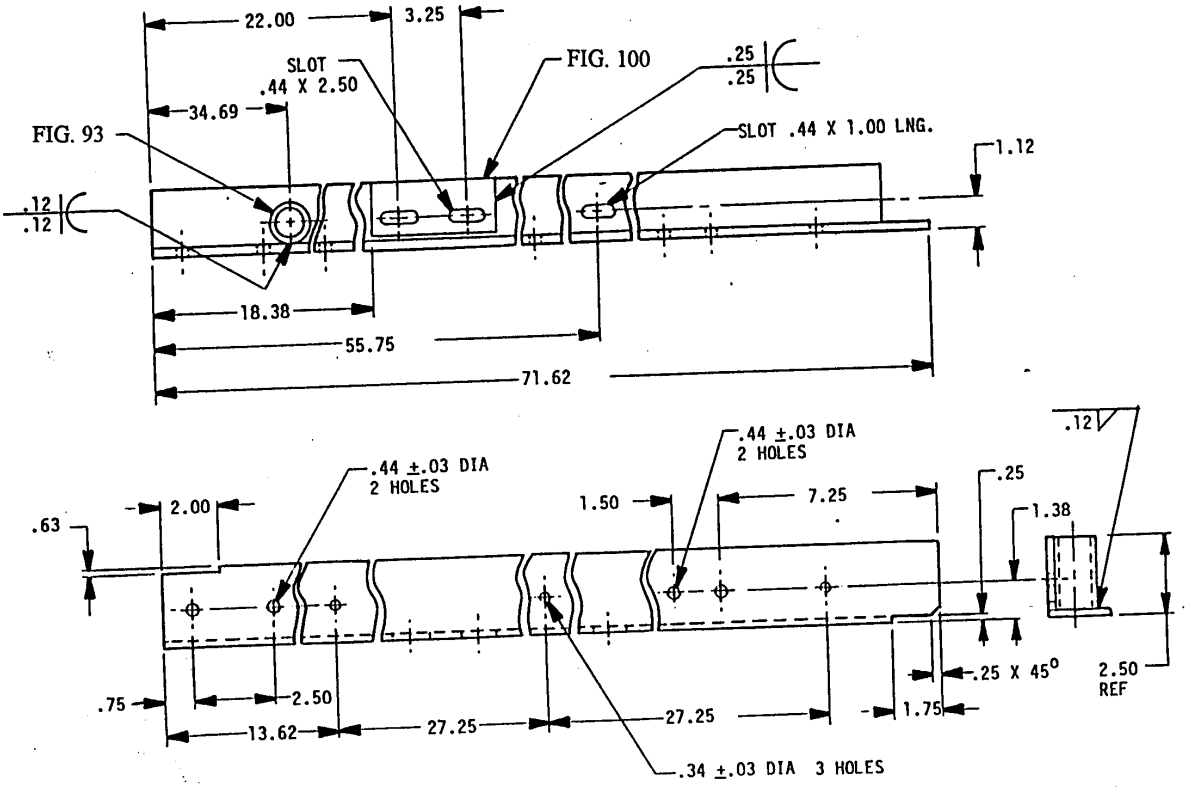
FIGURE 81. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

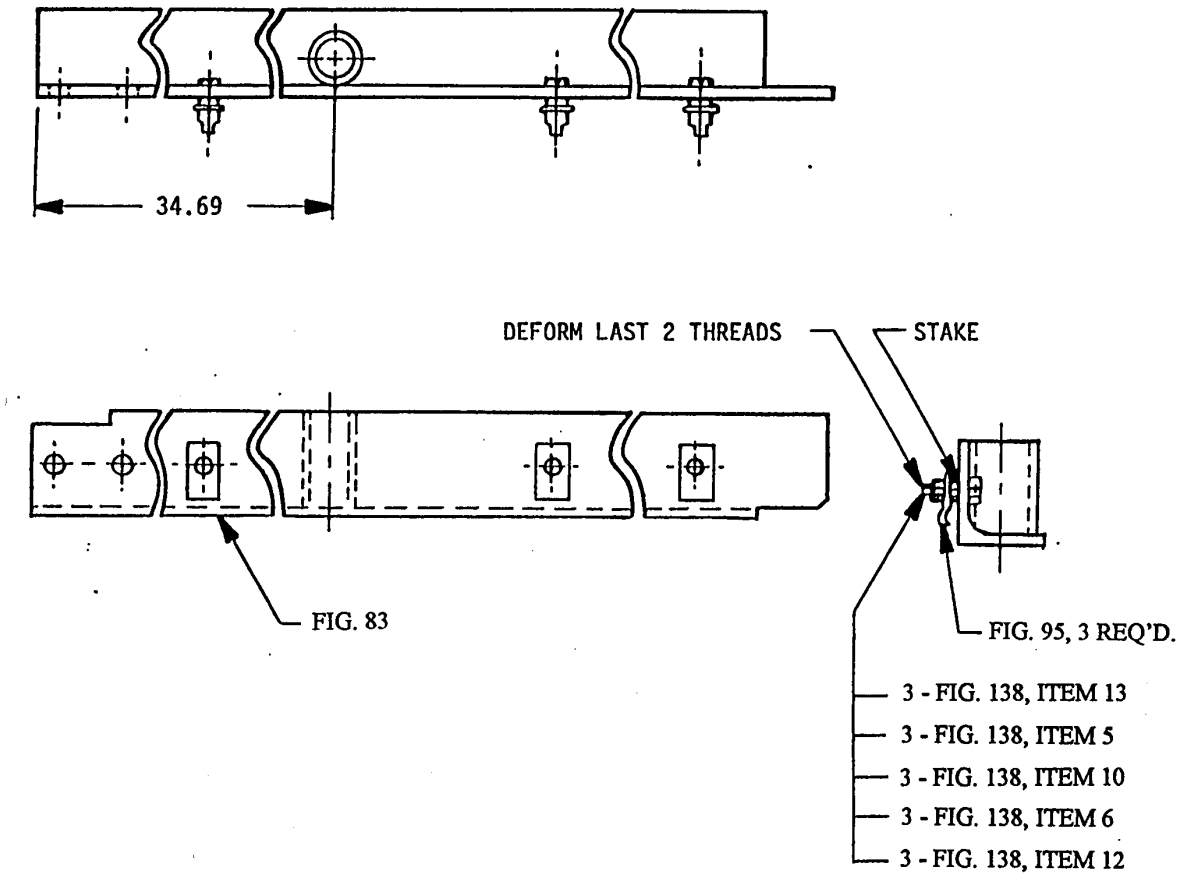
FIGURE 82. Base frame assembly.



NOTES:

1. Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.00 x 0.25 inch.
2. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
3. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

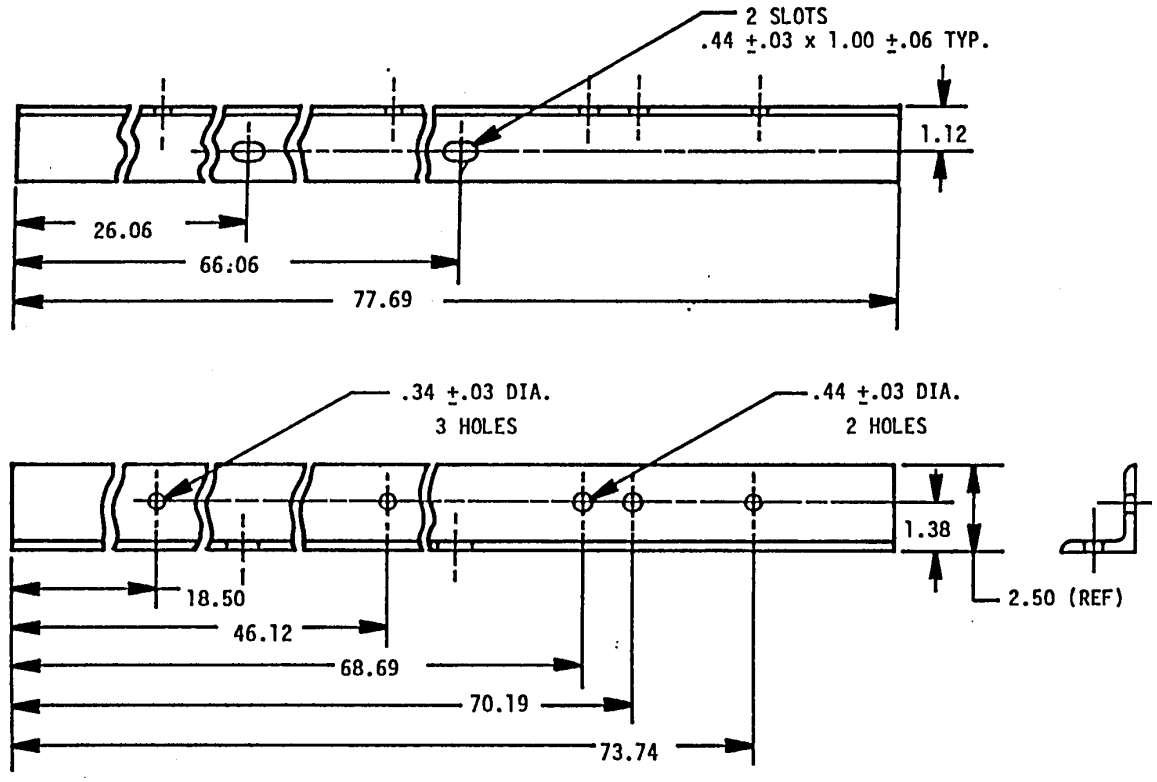
FIGURE 83. Base frame.



NOTE:

Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

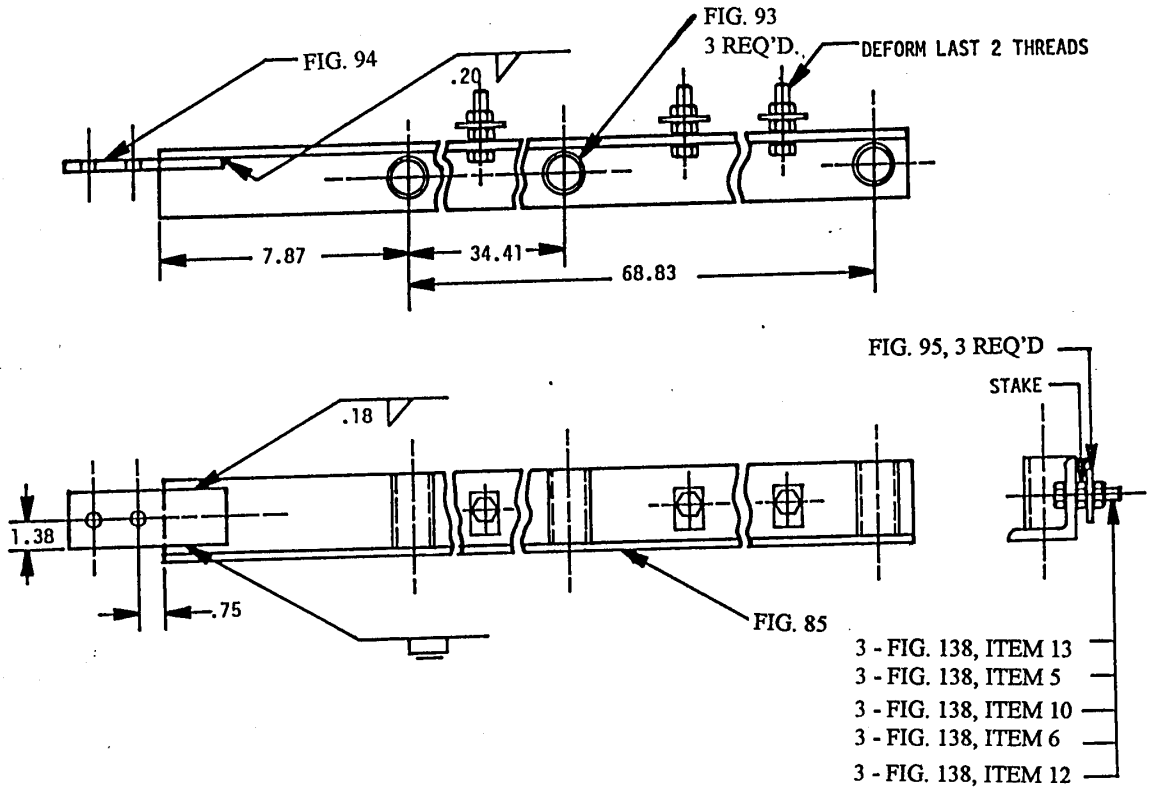
FIGURE 84. Base frame assembly.



NOTE:

Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.

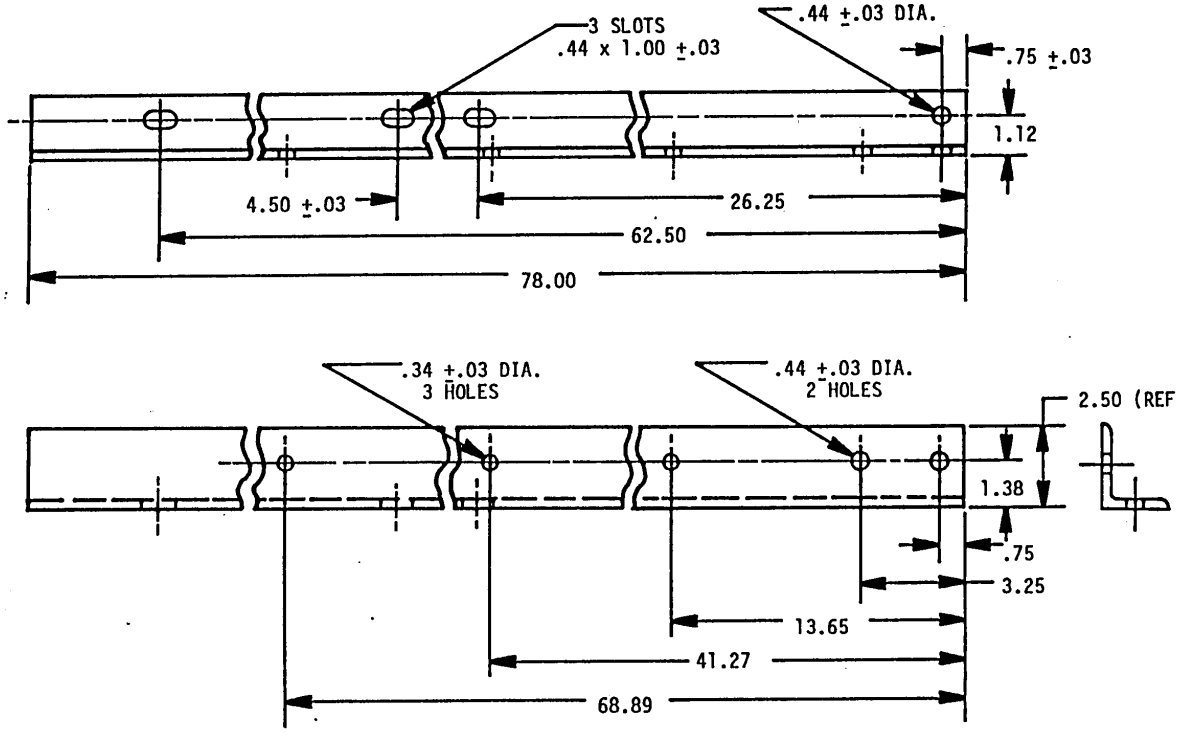
FIGURE 85. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

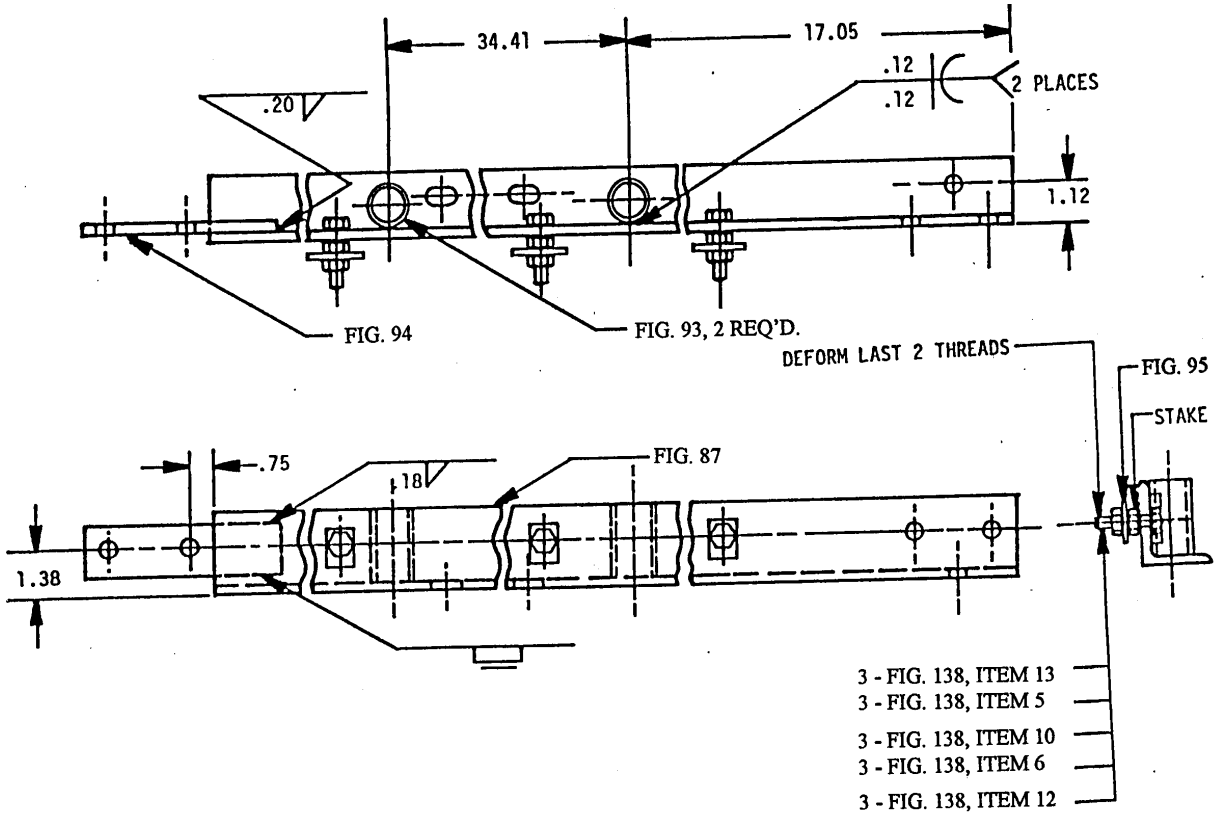
FIGURE 86. Base frame assembly.



NOTES:

1. Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

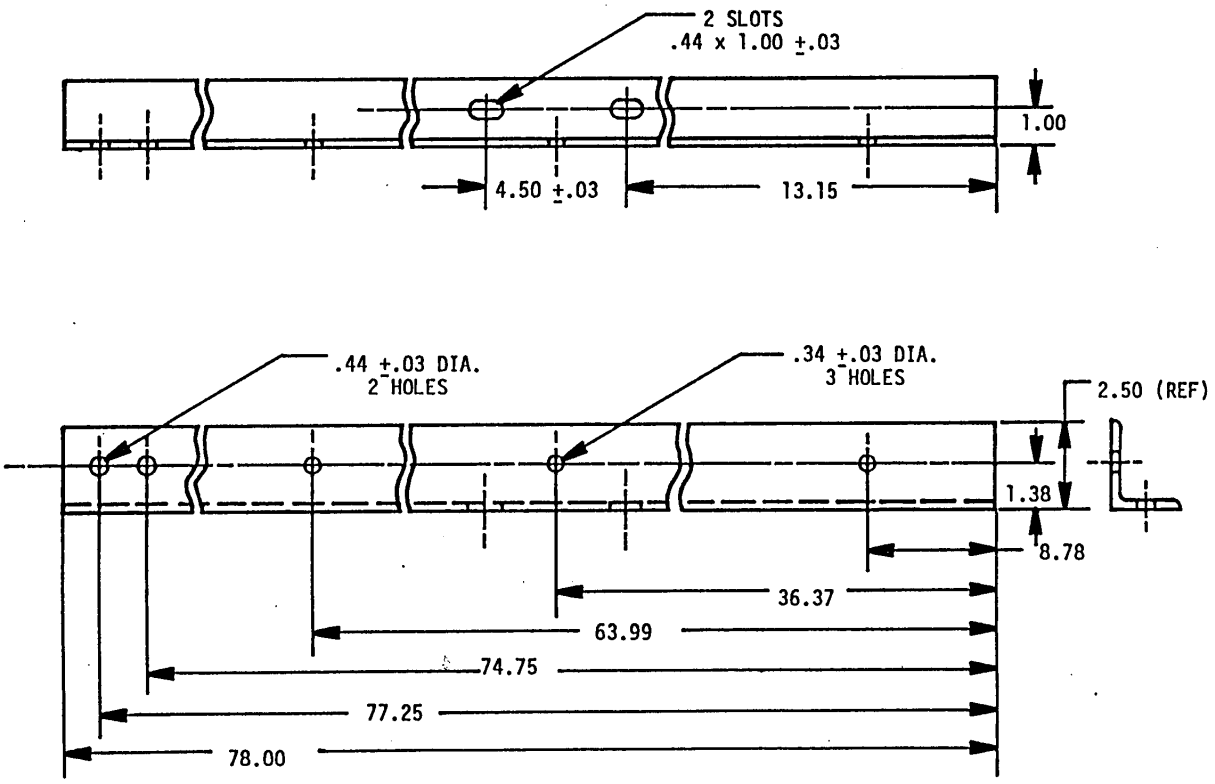
FIGURE 87. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

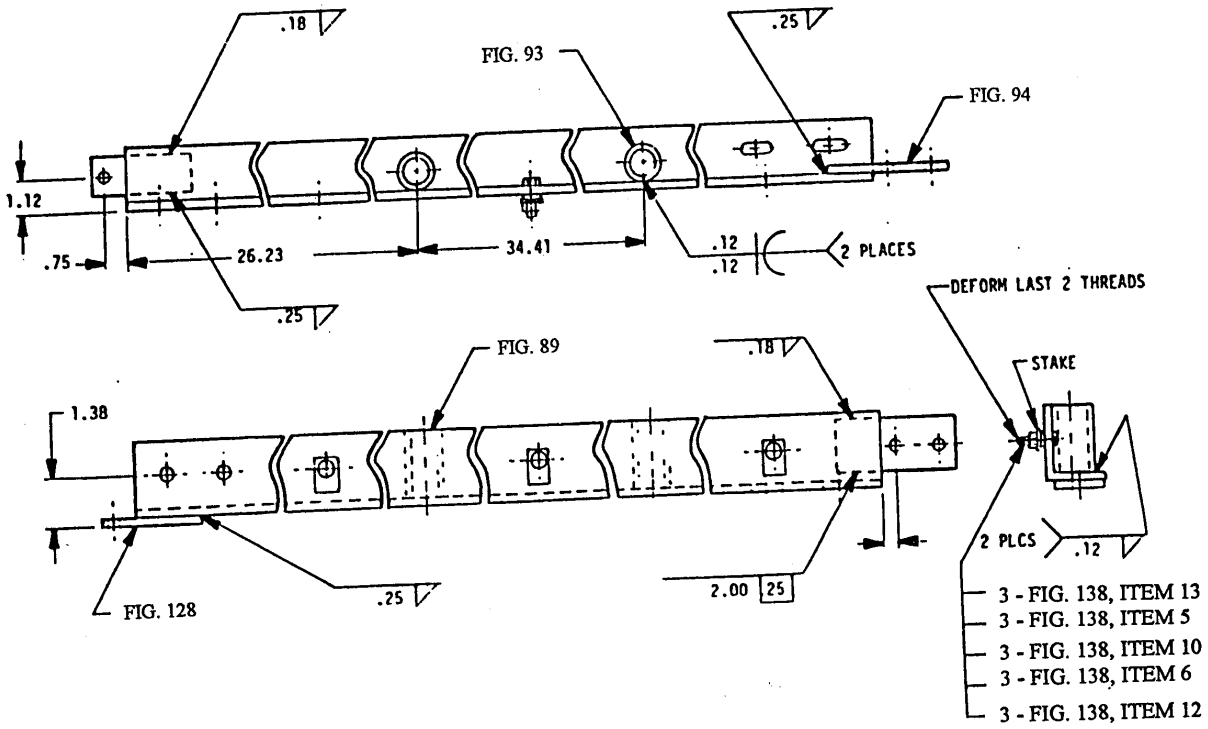
FIGURE 88. Base frame assembly.



NOTES:

1. Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

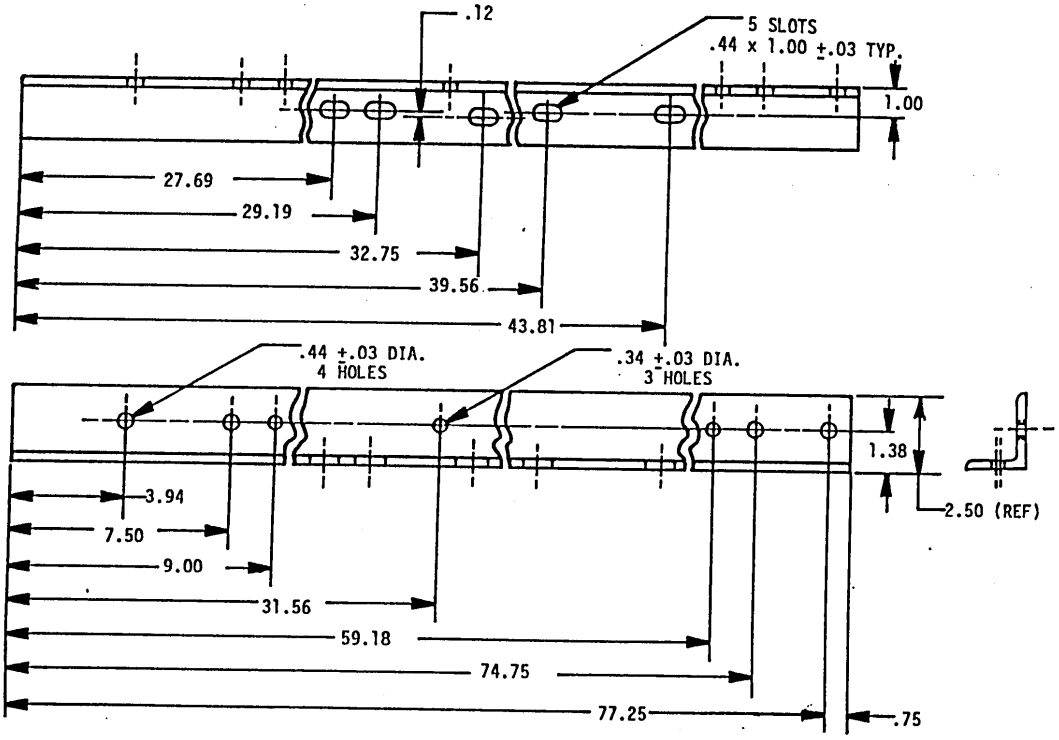
FIGURE 89. Base frame.



NOTES:

1. Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

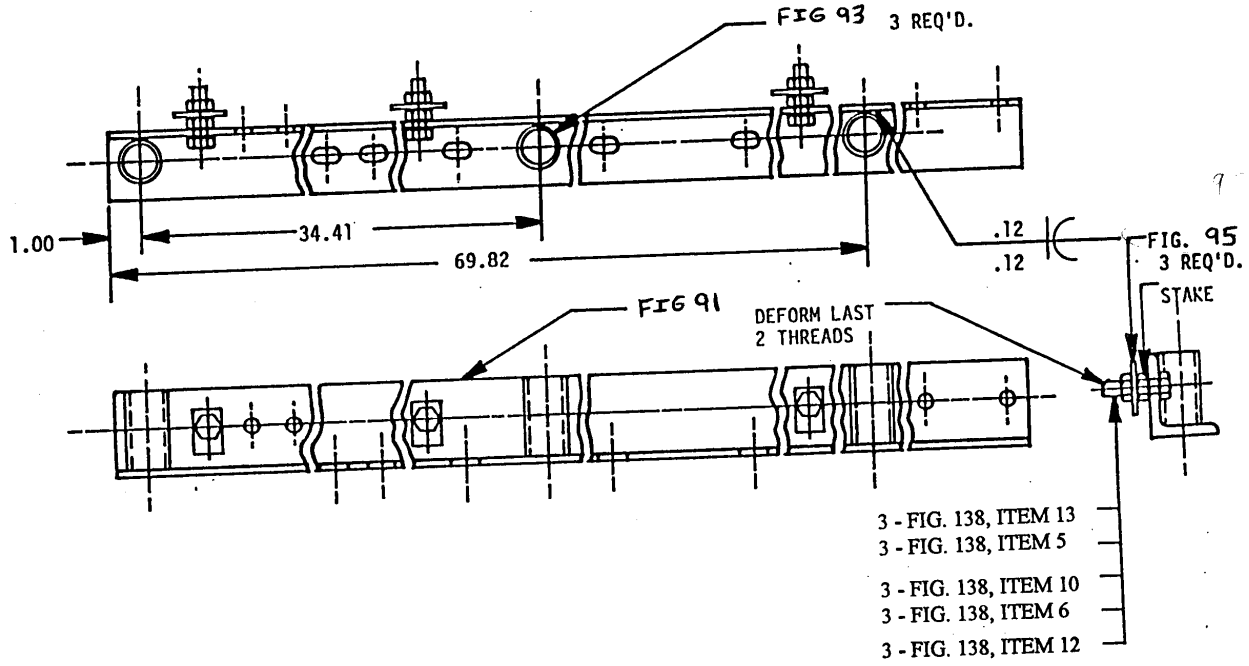
FIGURE 90. Base frame assembly.



NOTES:

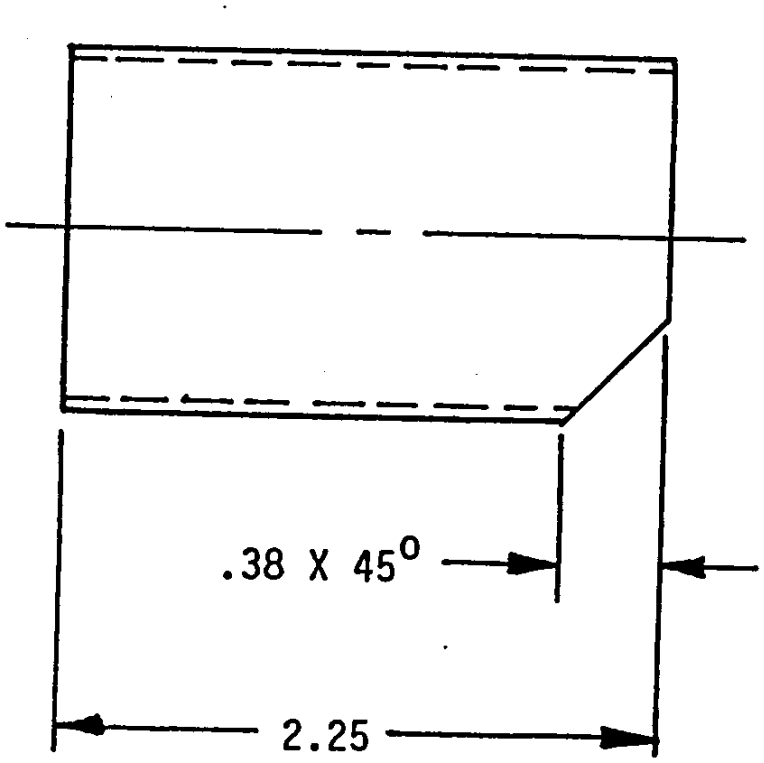
1. Material: Aluminum alloy 6061, temper T6, ASTM B241 or ASTM B221, 2.50 x 2.25 inch.
2. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 91. Base frame.



NOTE:
Use filler metal, class ER4043 or ER5356 of ANSI/AWS A5.10.

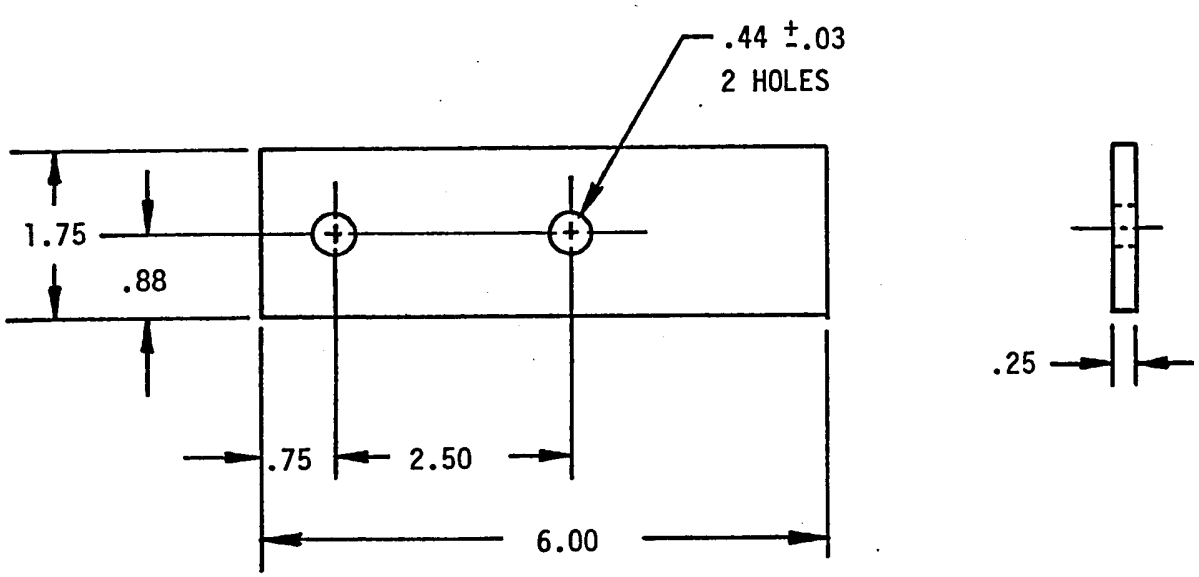
FIGURE 92. Base frame assembly.



NOTES:

1. Material: Tube, aluminum alloy 6061, temper T6, WW-T-700/6, 1.315 inch outside diameter (O.D.) x 1.33 inch wall.
2. Remove all burrs and sharp edges.
3. Twenty-four (24) are required.

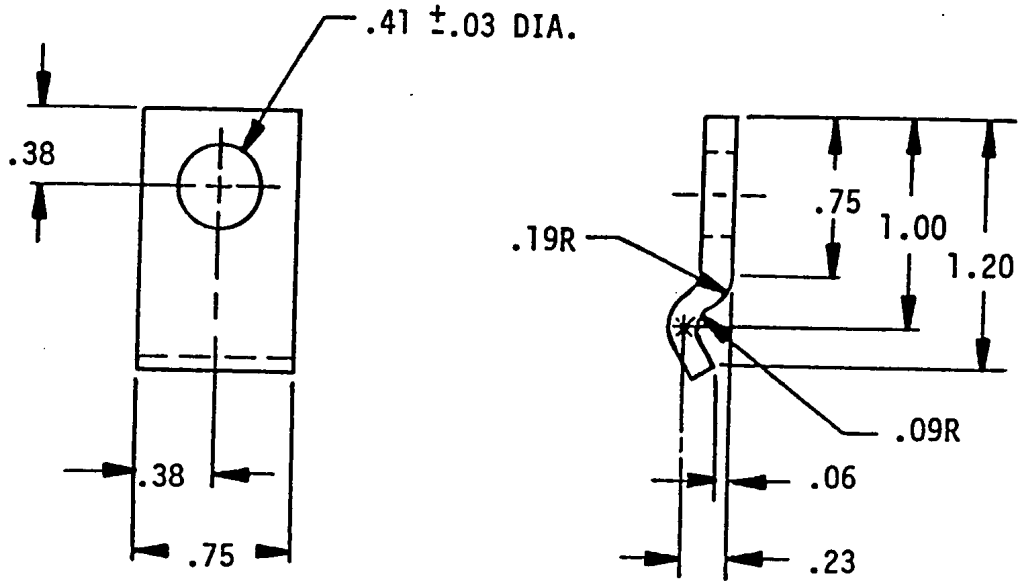
FIGURE 93. Engagement pipe.



NOTES:

1. Material: Aluminum alloy 6061, temper T6, QQ-A-250/11.
2. Remove all burrs and sharp edges.
3. Eight (8) are required.

FIGURE 94. Splice plate.



NOTES:

1. Material: Steel, ASTM A569 or ASTM A366, 0.0897 inch thick minimum.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Thirty-six (36) are required.

FIGURE 95. Clamp.

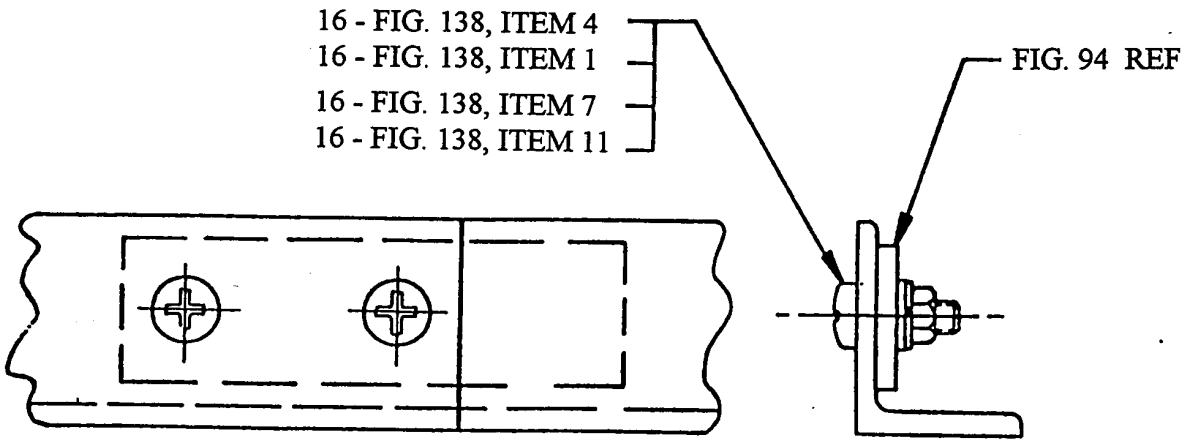


FIGURE 96. Base frame splice.

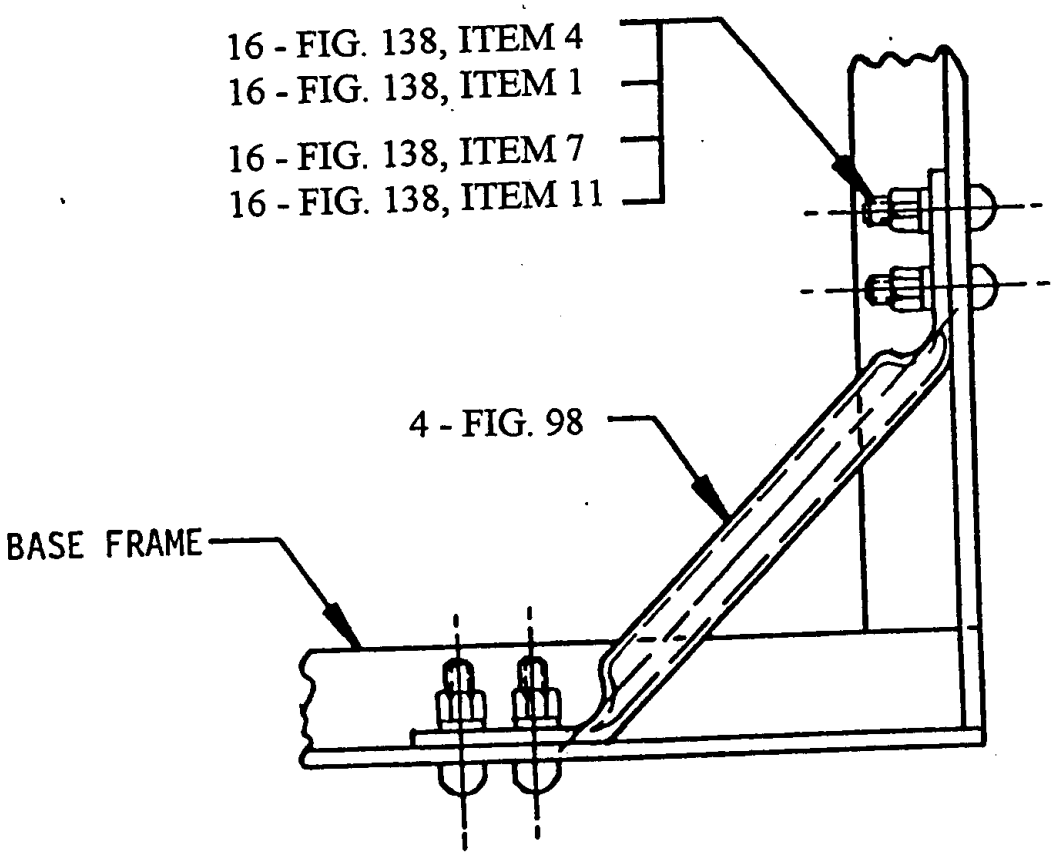
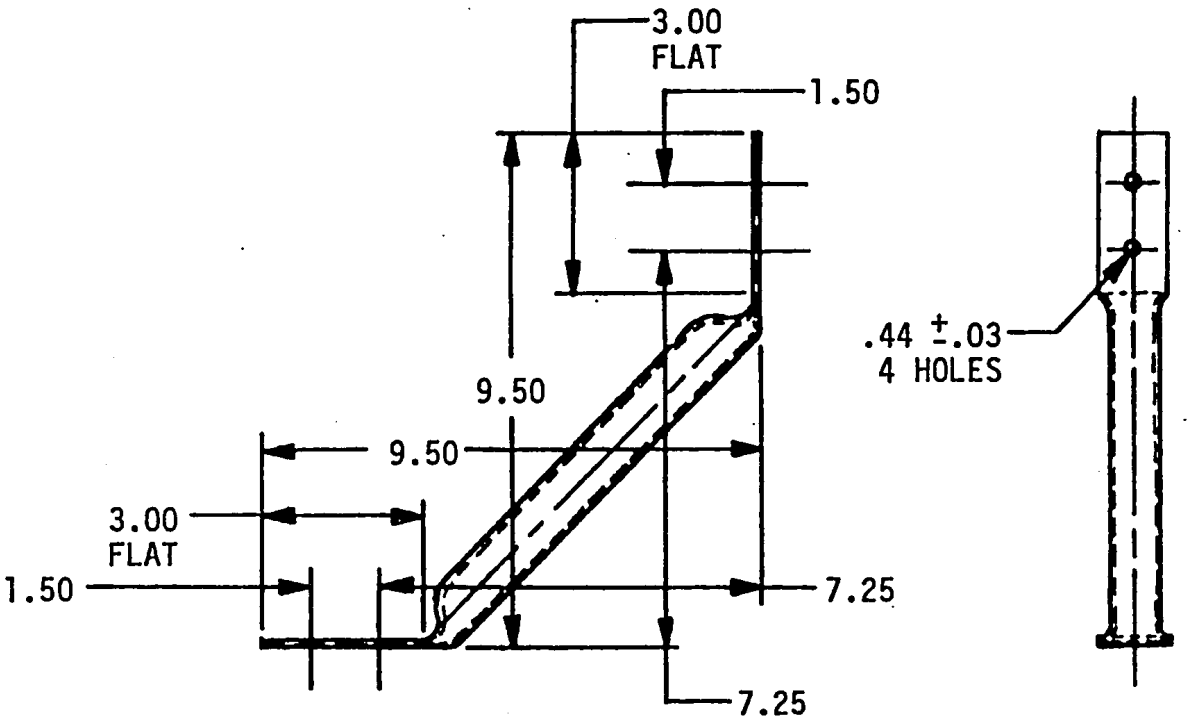


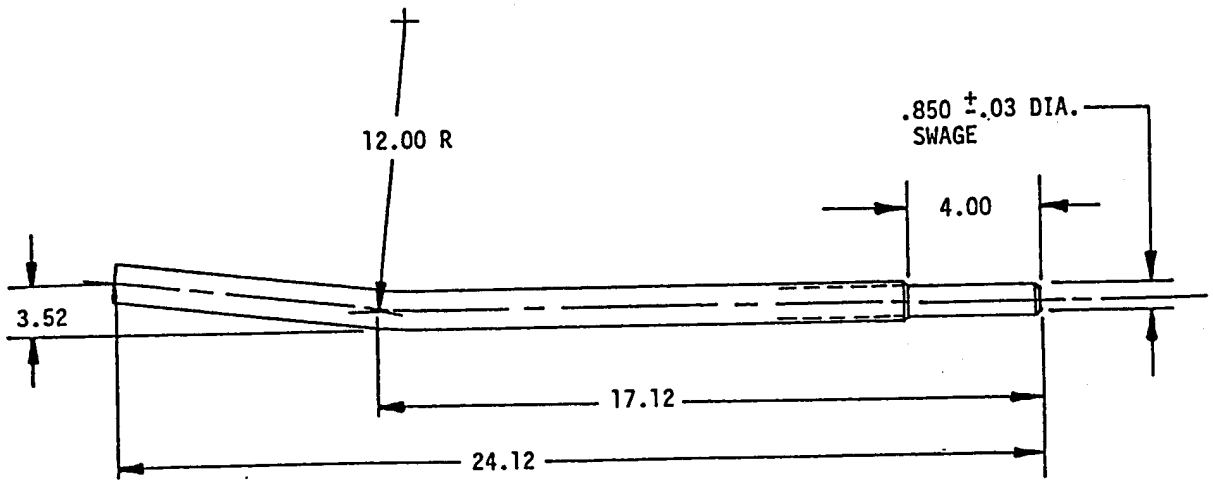
FIGURE 97. Corner construction, base frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

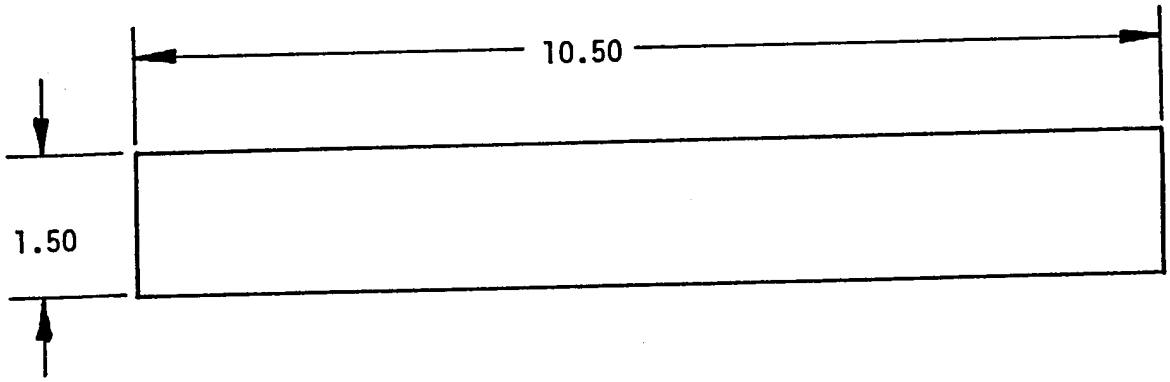
FIGURE 98. Tube, base frame corner.



NOTES:

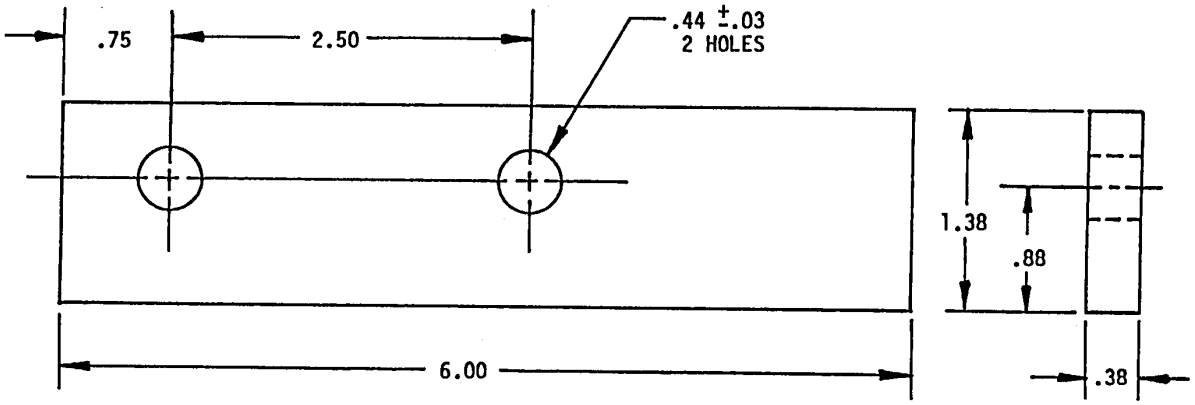
1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Twenty (20) are required.

FIGURE 99. Tube, top frame.



NOTES:
1. Material: Aluminum alloy 6061, temper T6, QQ-A-250/11, 0.25 inch thick.
2. Remove all burrs and sharp edges.

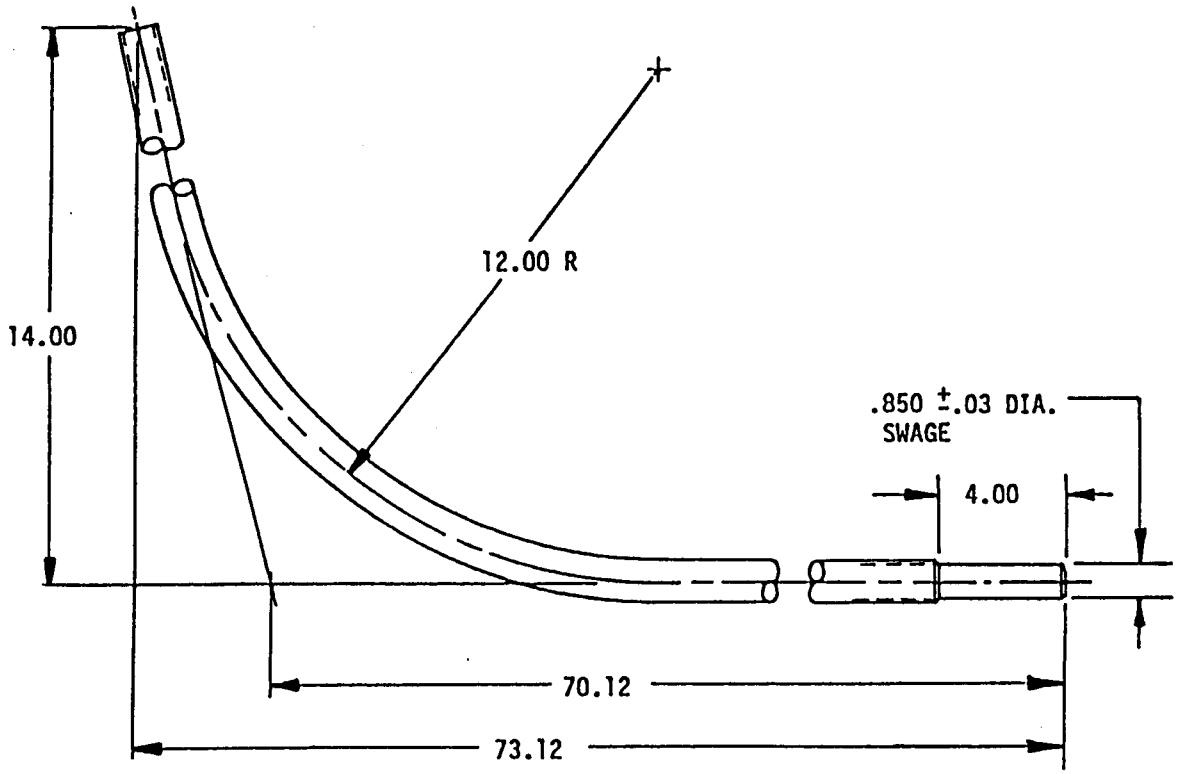
FIGURE 100. Plate.



NOTES:

1. Material: Aluminum alloy 6061, temper T6, QQ-A-250/11.
2. Remove all burrs and sharp edges.

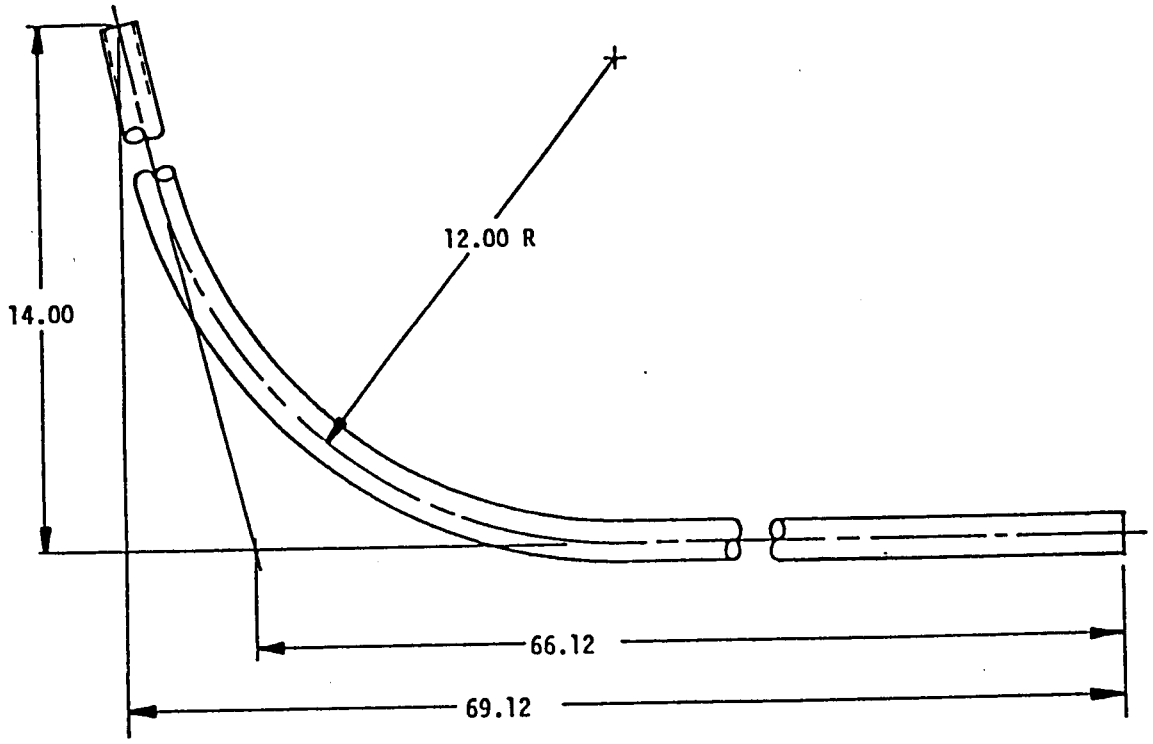
FIGURE 101. Splice plate.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

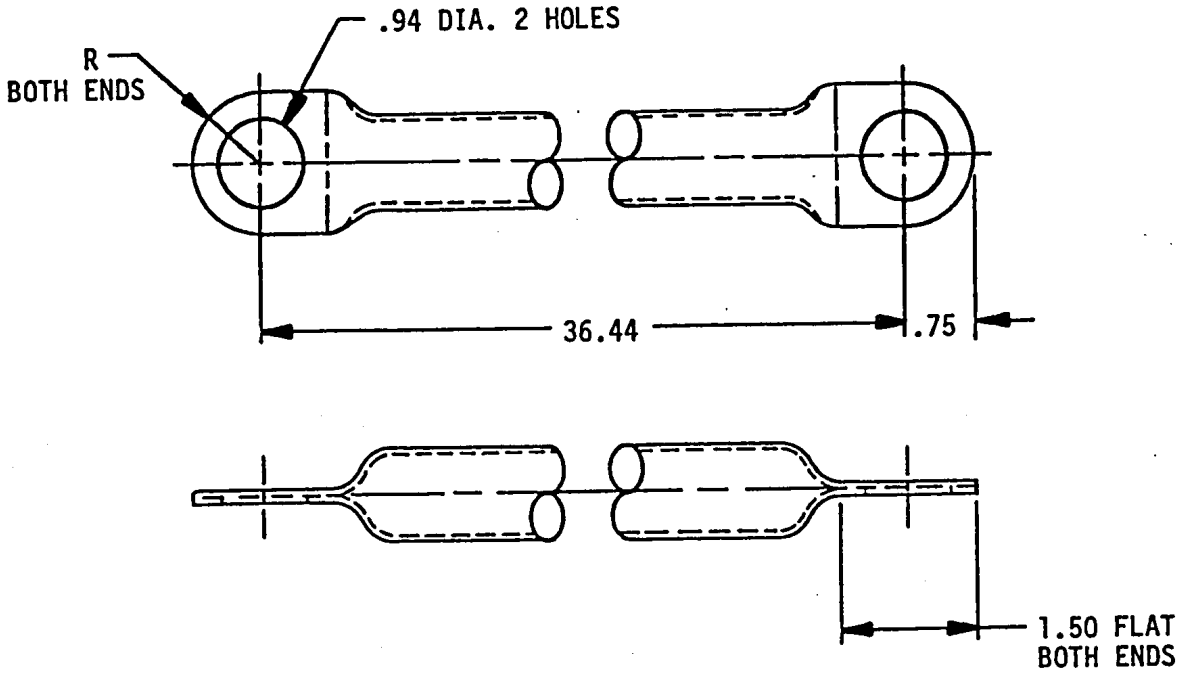
FIGURE 102. Tube, top frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Seven (7) are required.

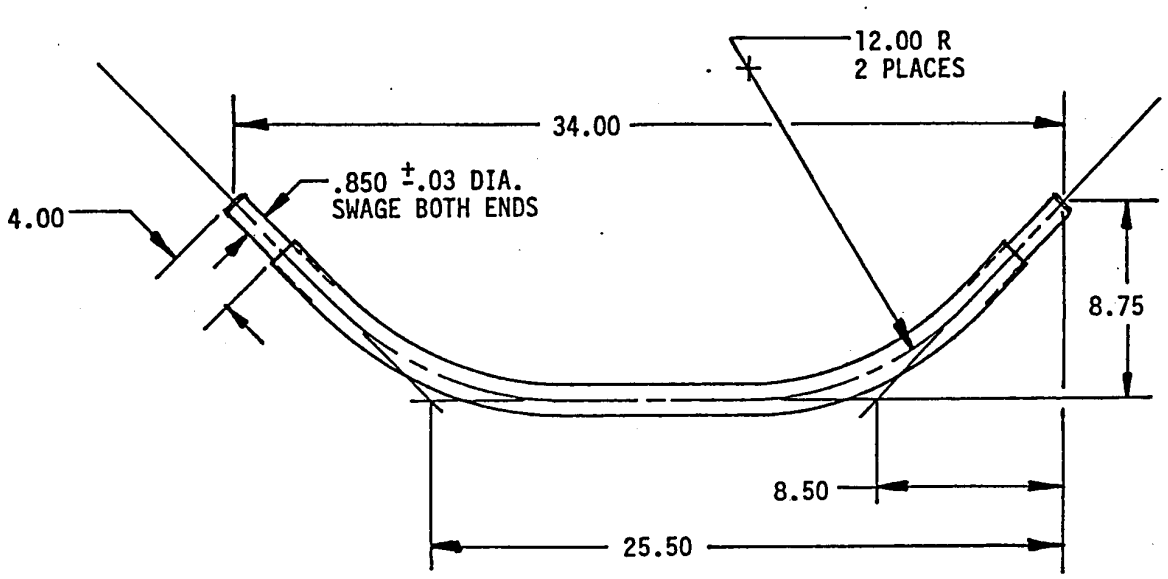
FIGURE 103. Tube, top frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) are required.

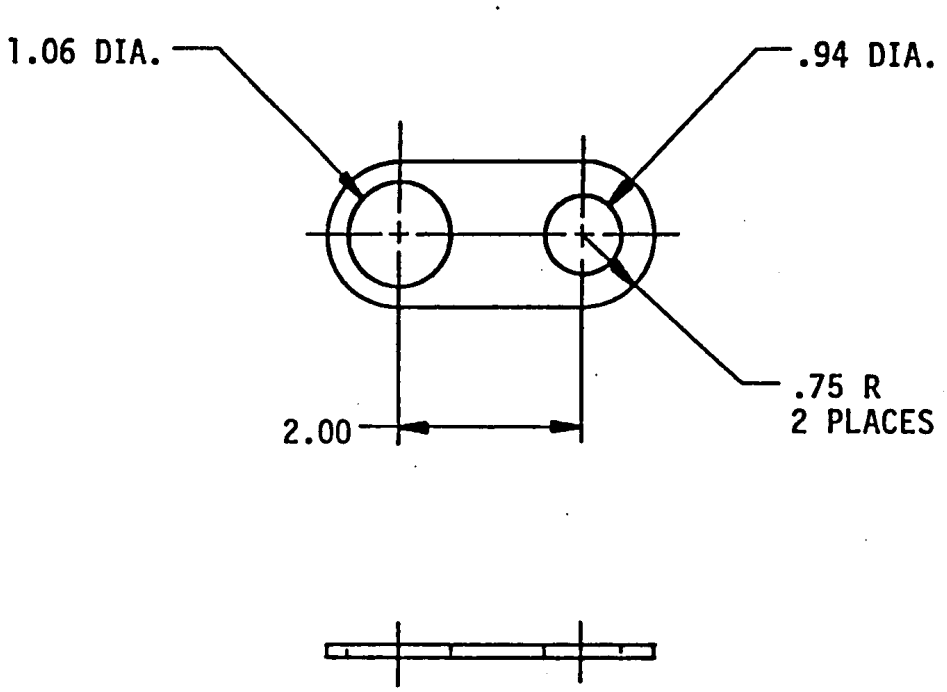
FIGURE 104. Link, frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Two (2) are required.

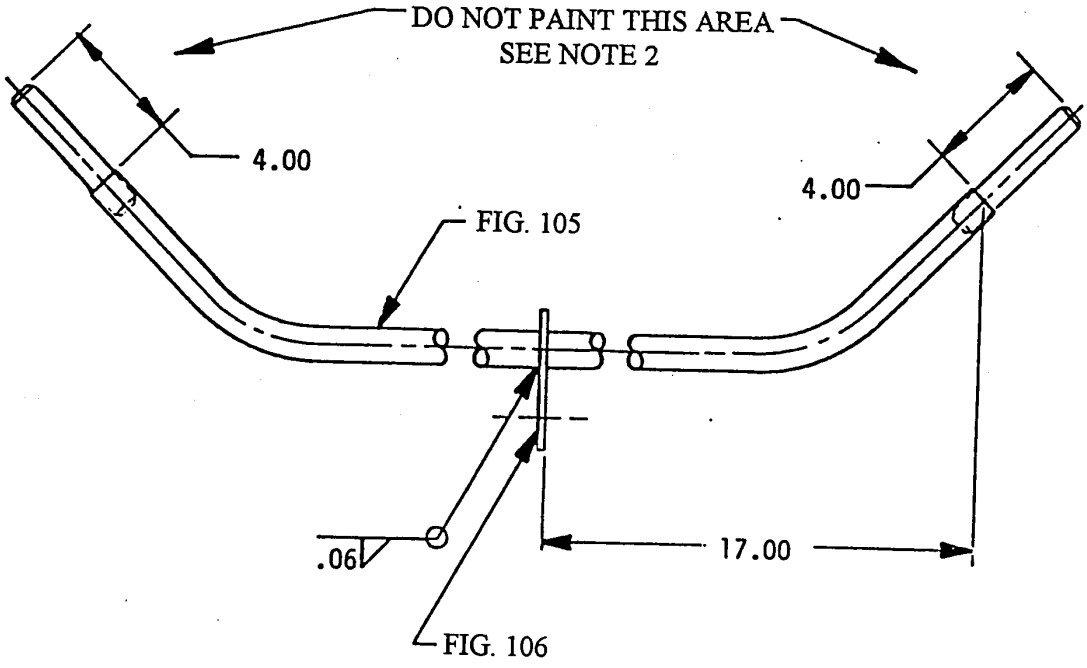
FIGURE 105. Tube, upper brace.



NOTES:

1. Material: Steel, ASTM A569 or ASTM A366, 0.1196 inch thick minimum.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per class 1A, MIL-C-5541. Apply primer per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Two (2) are required.

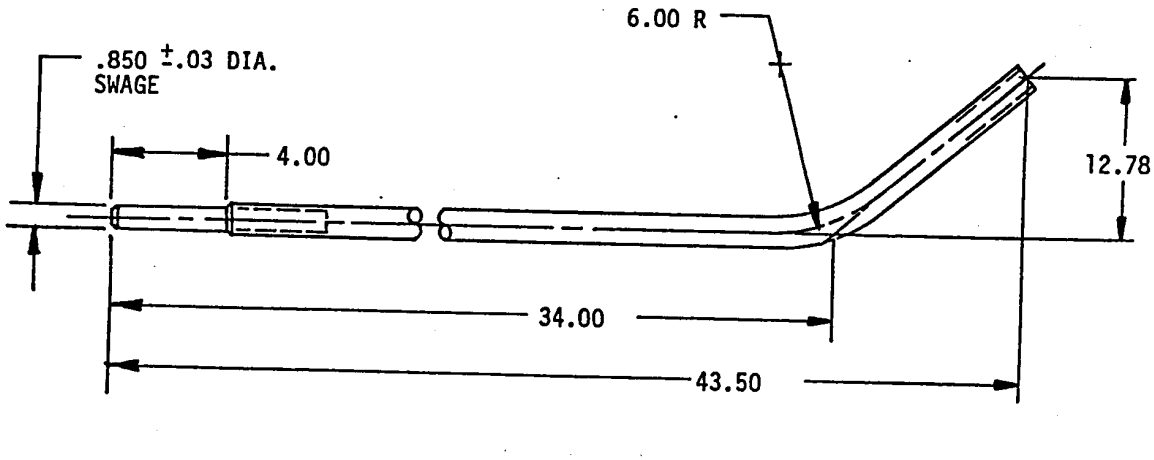
FIGURE 106. Plate.



NOTES:

1. All weld sizes are minimum.
2. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
3. Unpainted area to be coated with corrosion preventive compound, grade I, MIL-PRF-16173.
4. Two (2) are required.

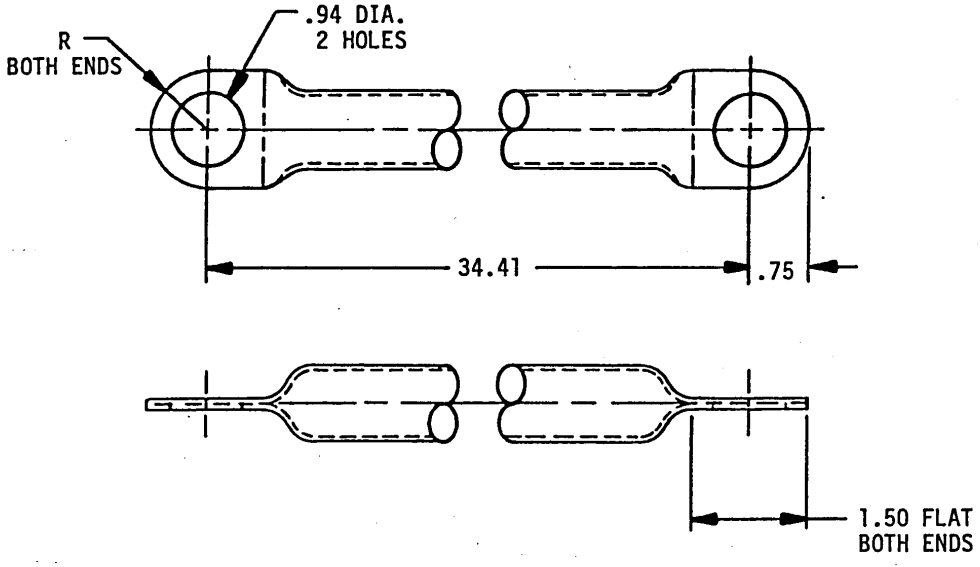
FIGURE 107. Tube assembly.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Four (4) are required.

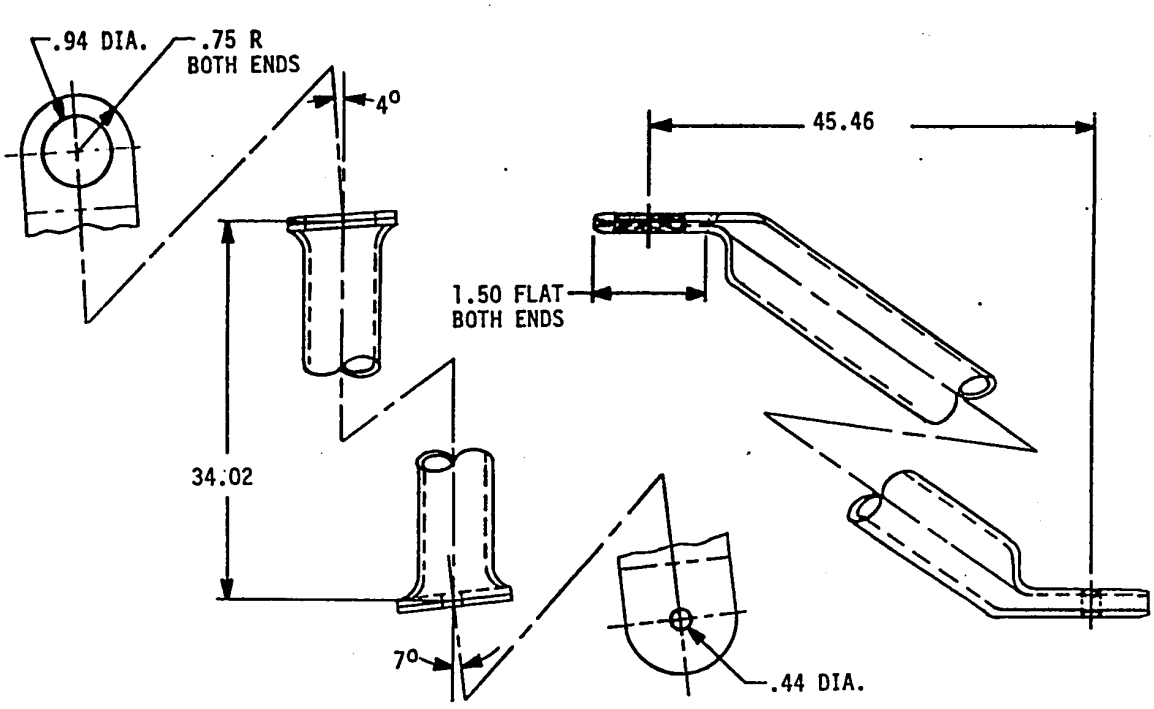
FIGURE 108. Tube, top frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Twenty-five (25) are required.

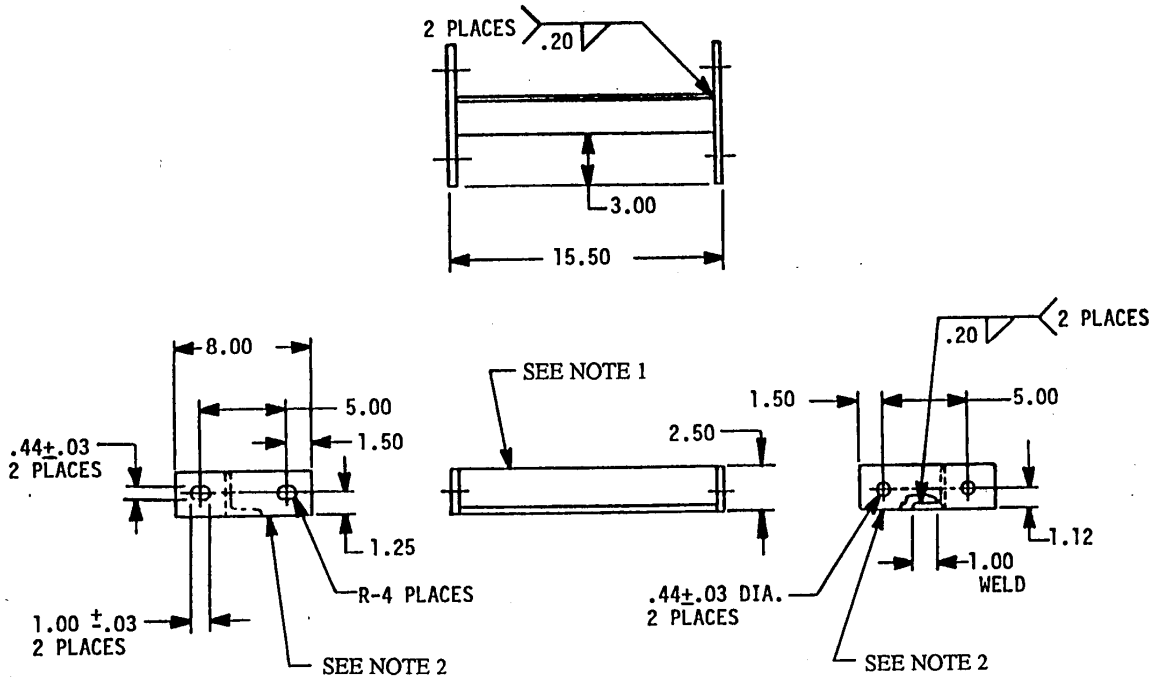
FIGURE 109. Link, frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) braces as shown are required.
6. Two (2) braces opposite as shown are required.

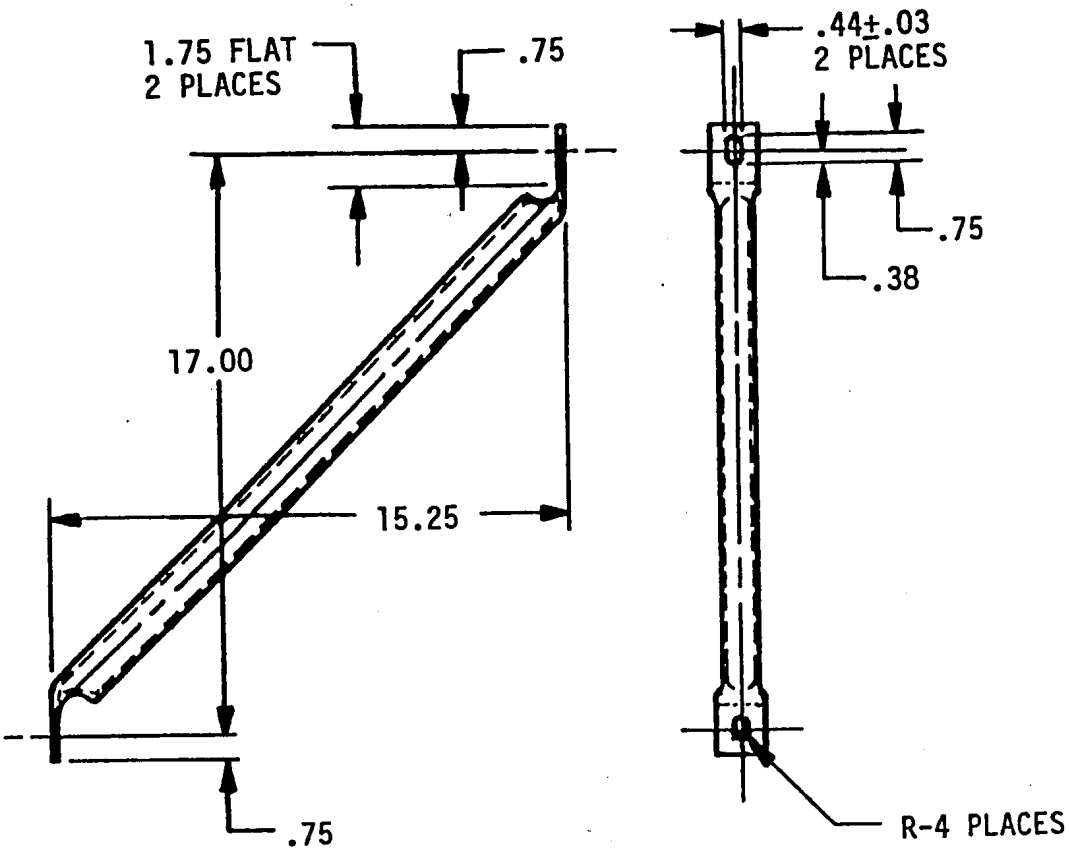
FIGURE 110. Tube brace.



NOTES:

1. Material: Steel, carbon, angle, ASTM A36, 2.50 x 2.00 x 0.25 inch.
2. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.25 inch.
3. All weld sizes are minimum.
4. Remove all burrs and sharp edges.
5. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
6. Two (2) are required.

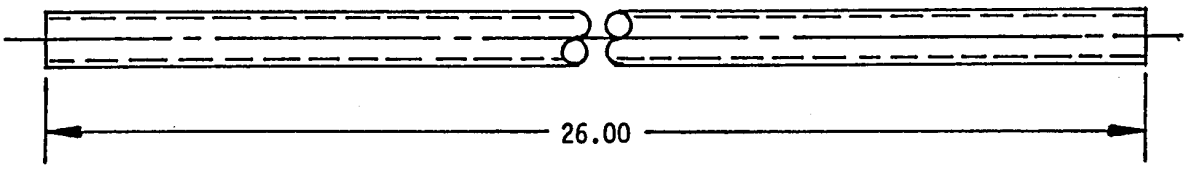
FIGURE 111. Bracket.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) are required.

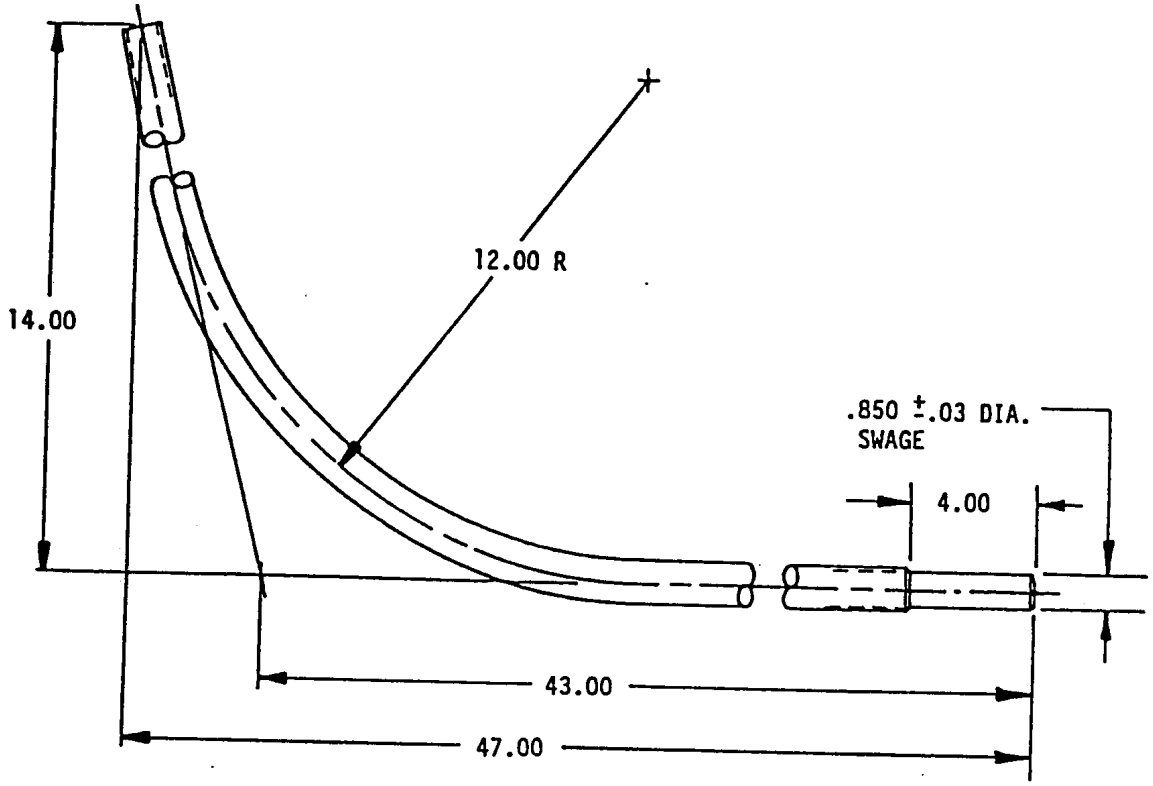
FIGURE 112. Brace.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) are required.

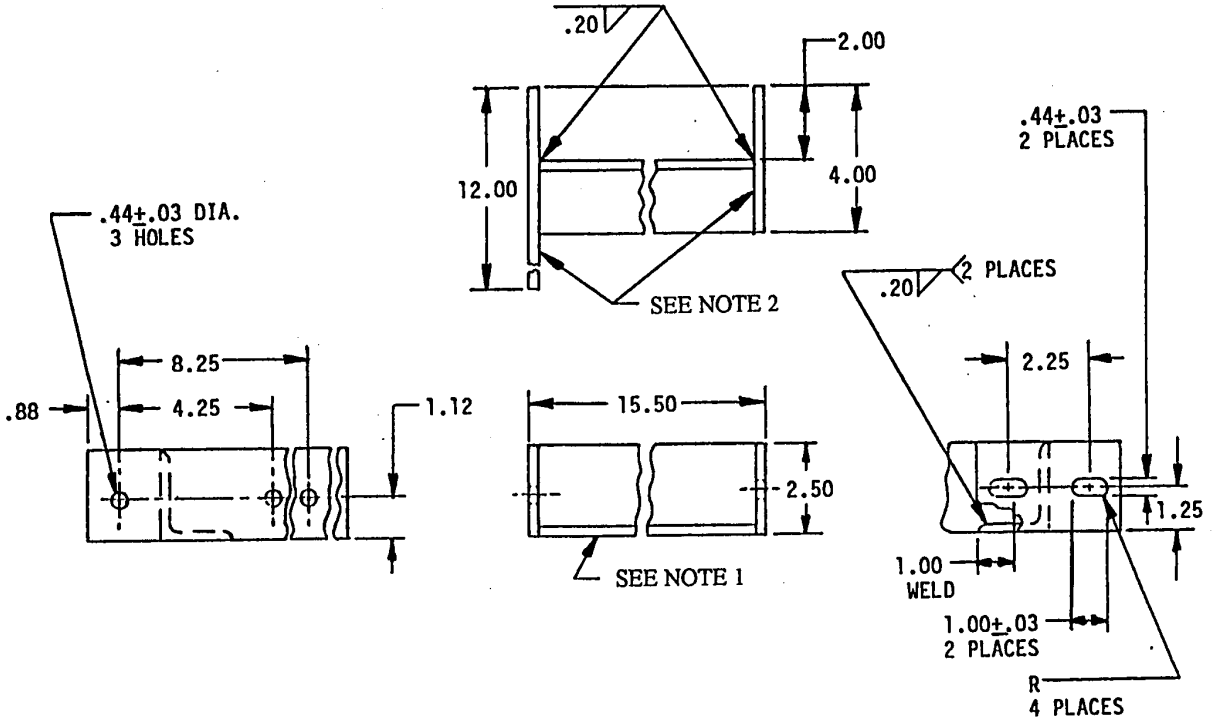
FIGURE 113. Tube, top frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) are required.

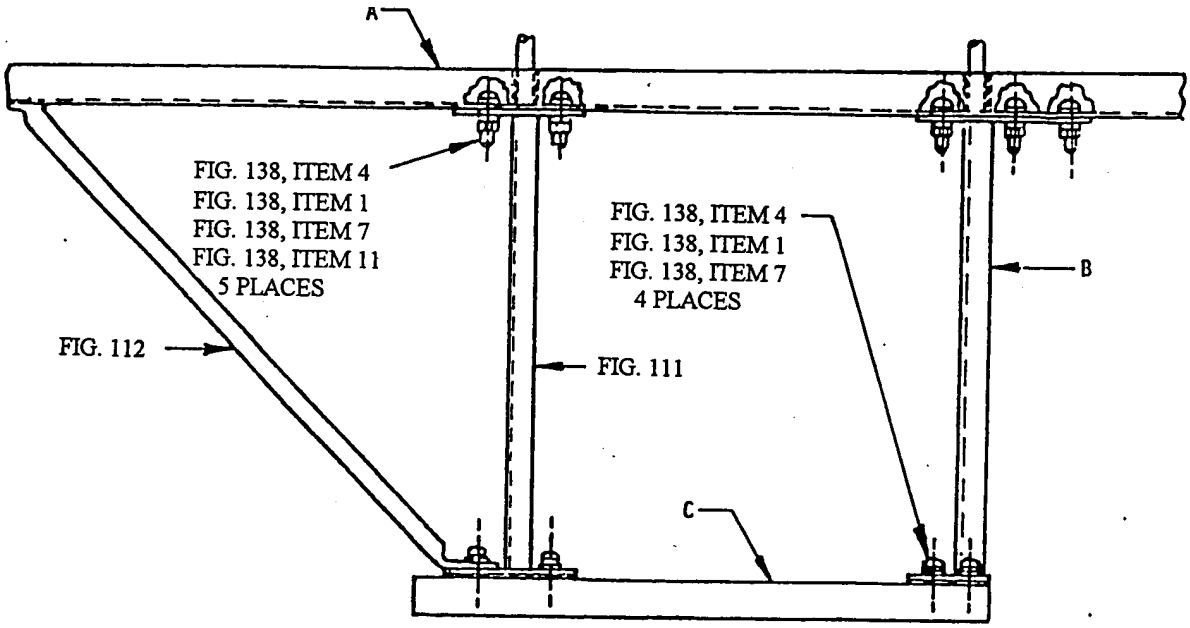
FIGURE 114. Tube, top frame.



NOTES:

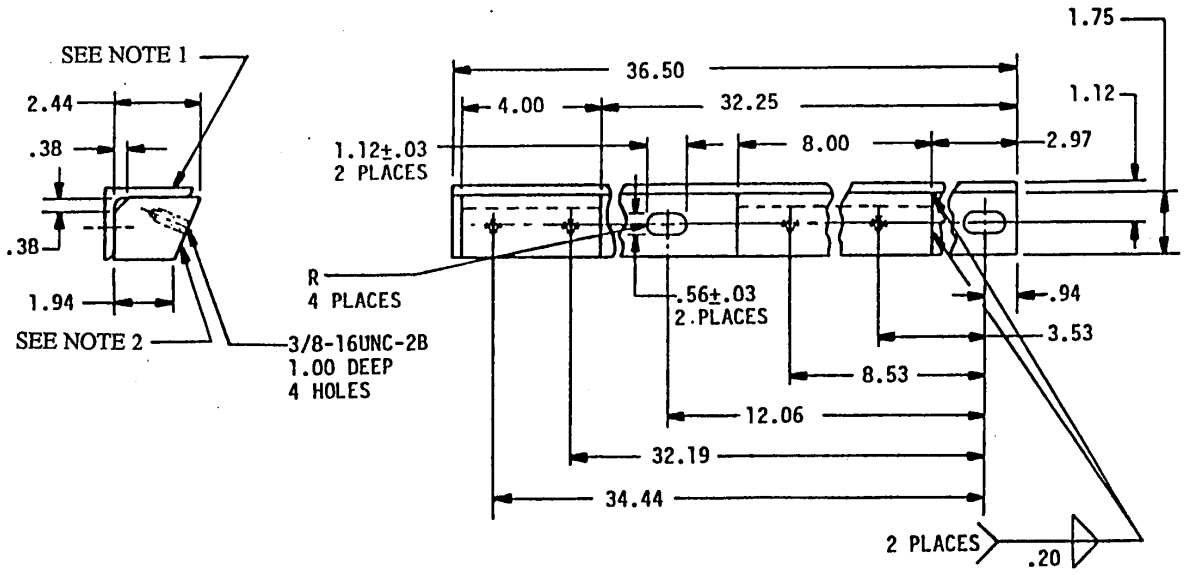
1. Material: Steel, carbon, angle, ASTM A36, 2.50 x 2.00 x 0.25 inch.
2. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.25 inch thick.
3. All weld sizes are minimum.
4. Remove all burrs and sharp edges.
5. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
6. One (1) bracket as shown is required.
7. One (1) bracket opposite as shown is required.

FIGURE 115. Bracket.



	A	B	C
SHOWN	FIG. D11	FIG. D54, NOTE 6	FIG. D56, NOTE 6
OPPOSITE	FIG. D9	FIG. D54, NOTE 7	FIG. D56, NOTE 7

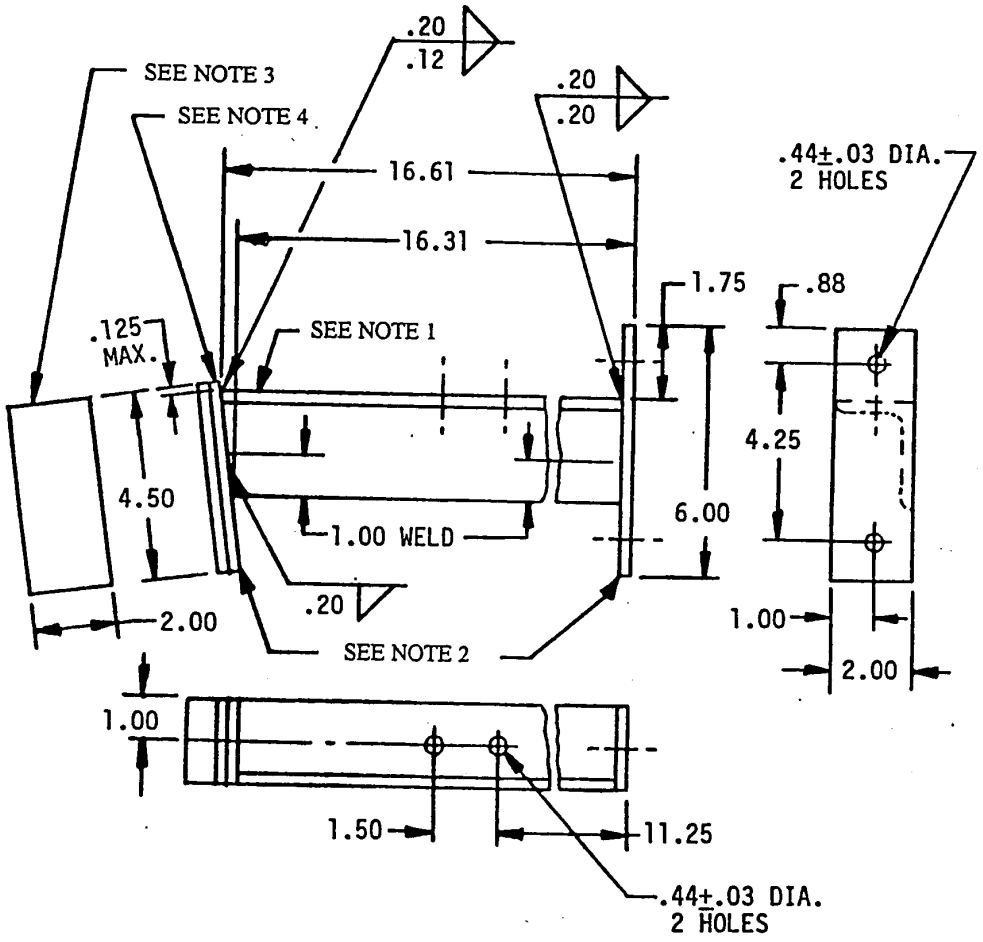
FIGURE 116. Frame to vehicle installation, headlight bracket.



NOTES:

1. Material: Steel, carbon, angle, ASTM A36, 2.50 x 2.00 x 0.25 inch.
2. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 1.75 x 2.50 x 12.00 inch.
3. All weld sizes are minimum.
4. Remove all burrs and sharp edges.
5. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
6. One (1) support as shown is required.
7. One (1) support opposite as shown is required.

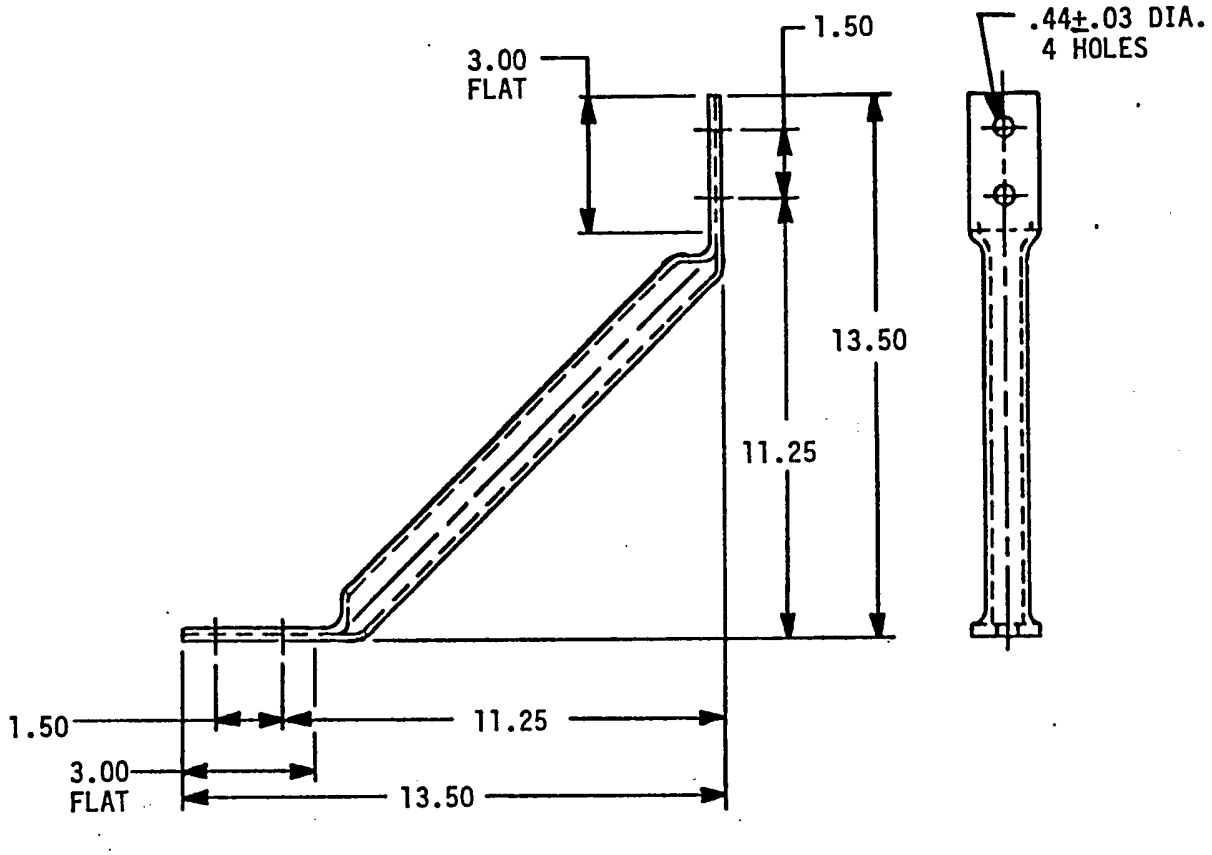
FIGURE 117. Support.



NOTES:

1. Material: Steel, carbon, angle, ASTM A36, 2.50 x 2.00 x 0.25 inch.
2. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.25 inch thick.
3. Material: Rubber per MIL-R-3065 and ASTM D2000, 3BC 715A14 B14, 0.25 inch thick.
4. Material: Adhesive, type II, MMM-A-1617.
5. All weld sizes are minimum.
6. Remove all burrs and sharp edges.
7. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
8. Two (2) supports are required.

FIGURE 118. Support.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) braces are required.

FIGURE 119. Brace.

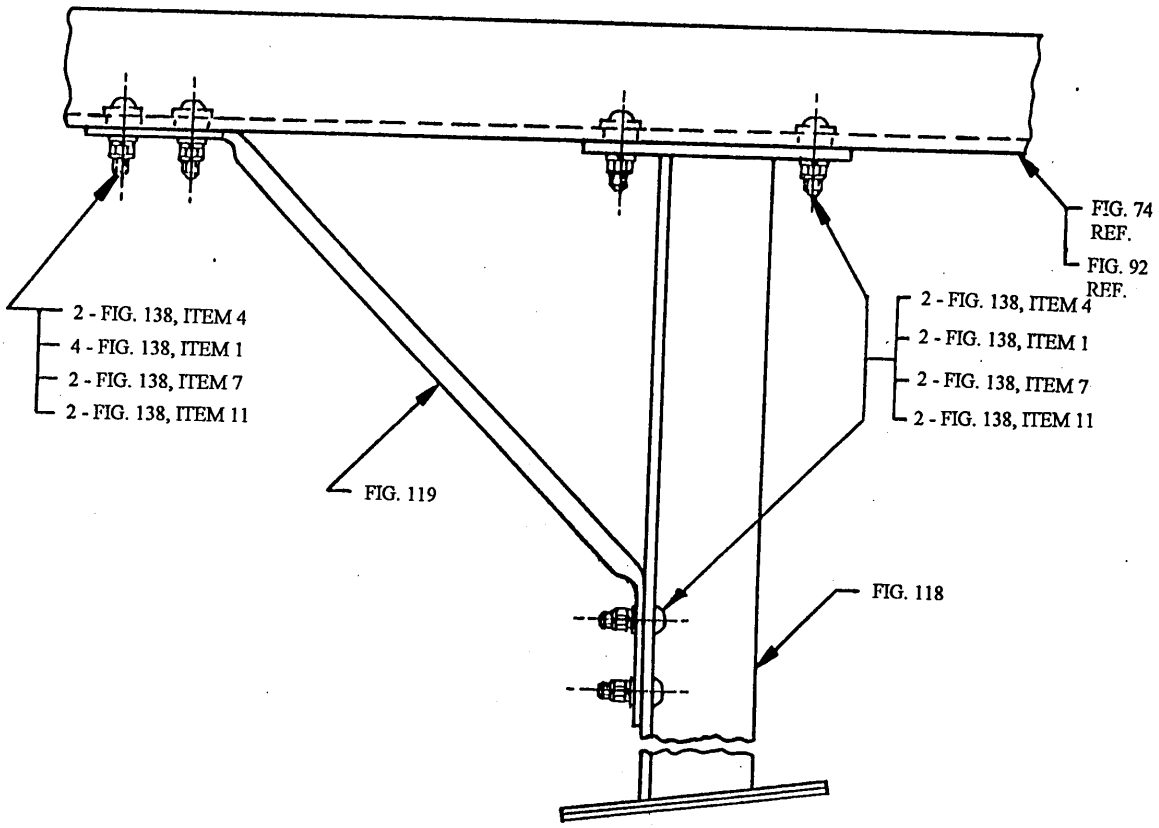
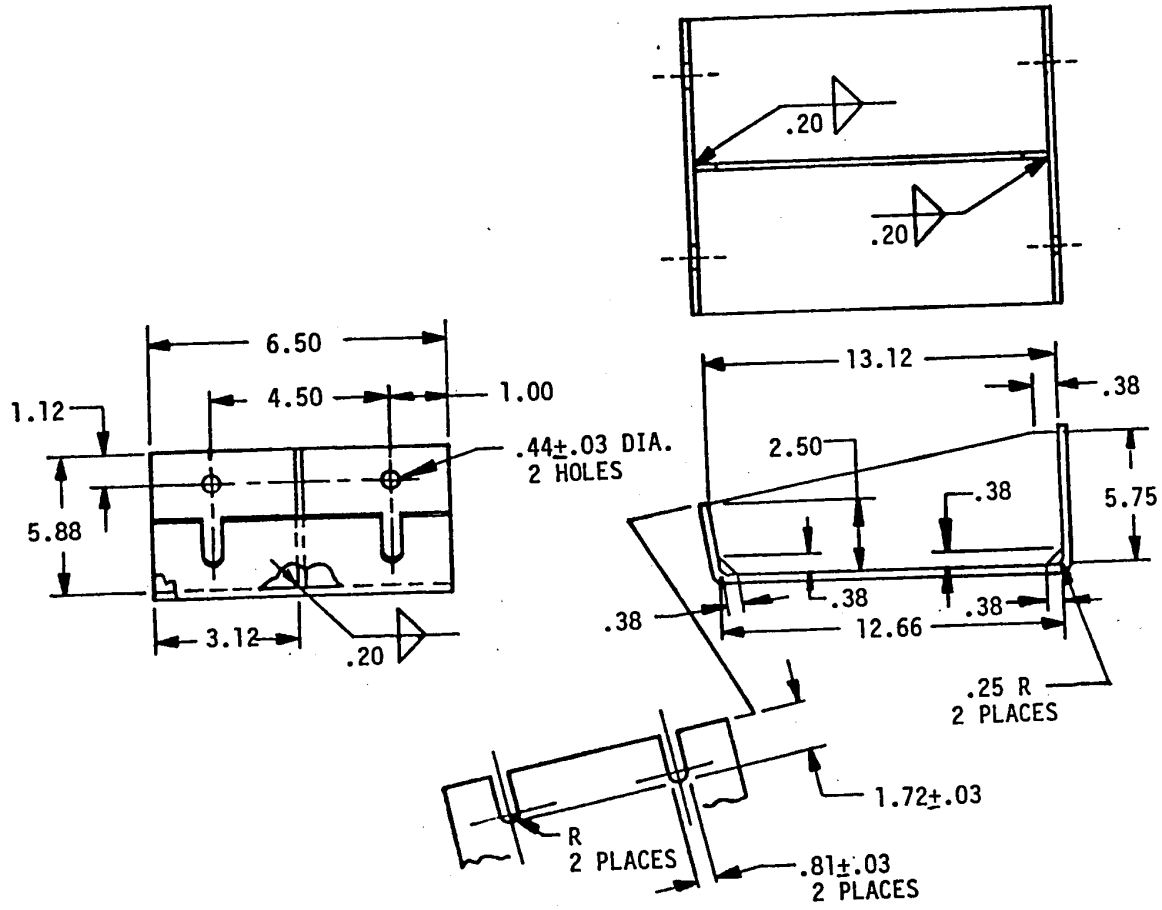


FIGURE 120. Frame to vehicle installation.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576.
2. All weld sizes are minimum.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. Two (2) brackets are required.

FIGURE 121. Bracket.

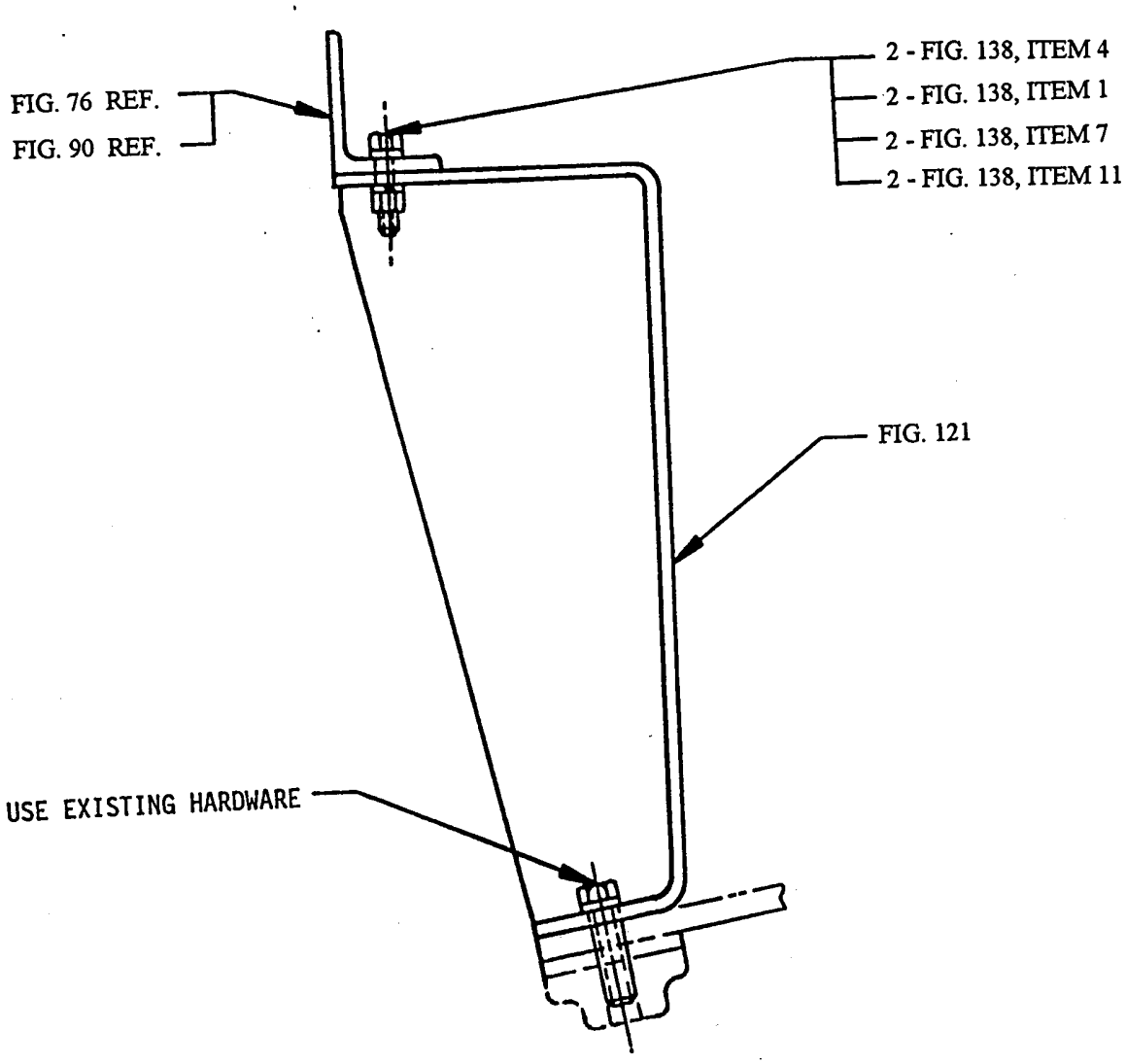
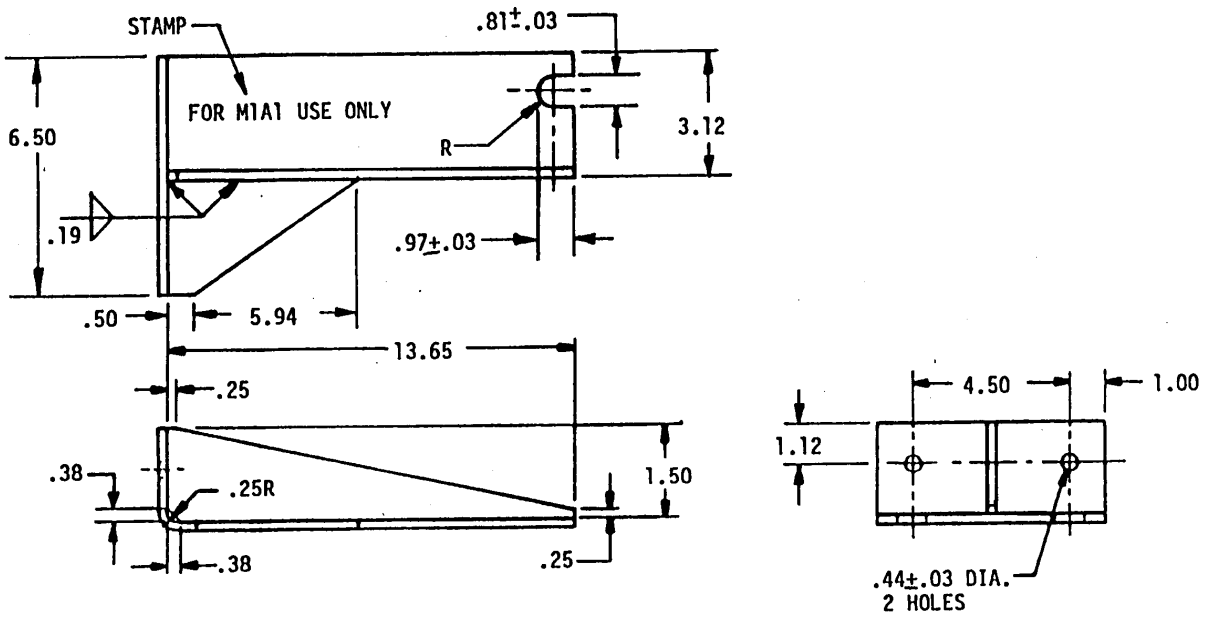


FIGURE 122. Frame to vehicle installation.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576, 0.25 inch thick.
2. All weld sizes are minimum.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Apply primer per MIL-P-53030. Paint per MIL-C-46168 or MIL-C-53039, green 383, 1.8 to 2.2 mils thick dry coat.

FIGURE 123. Bracket.

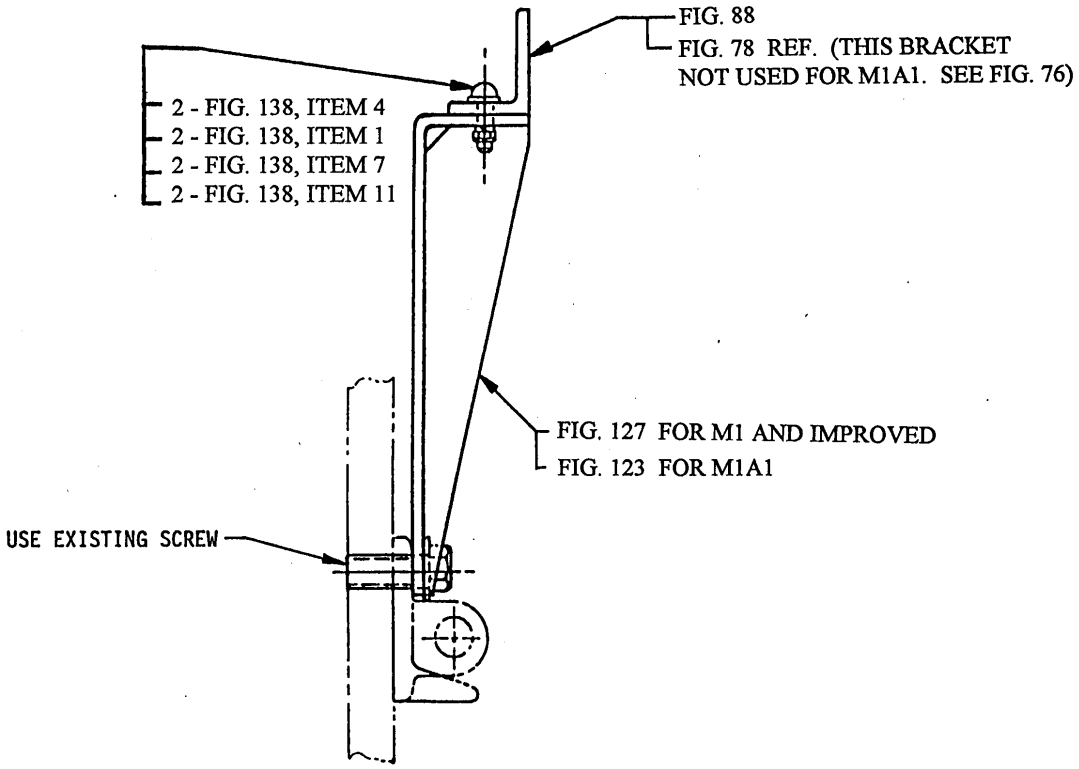
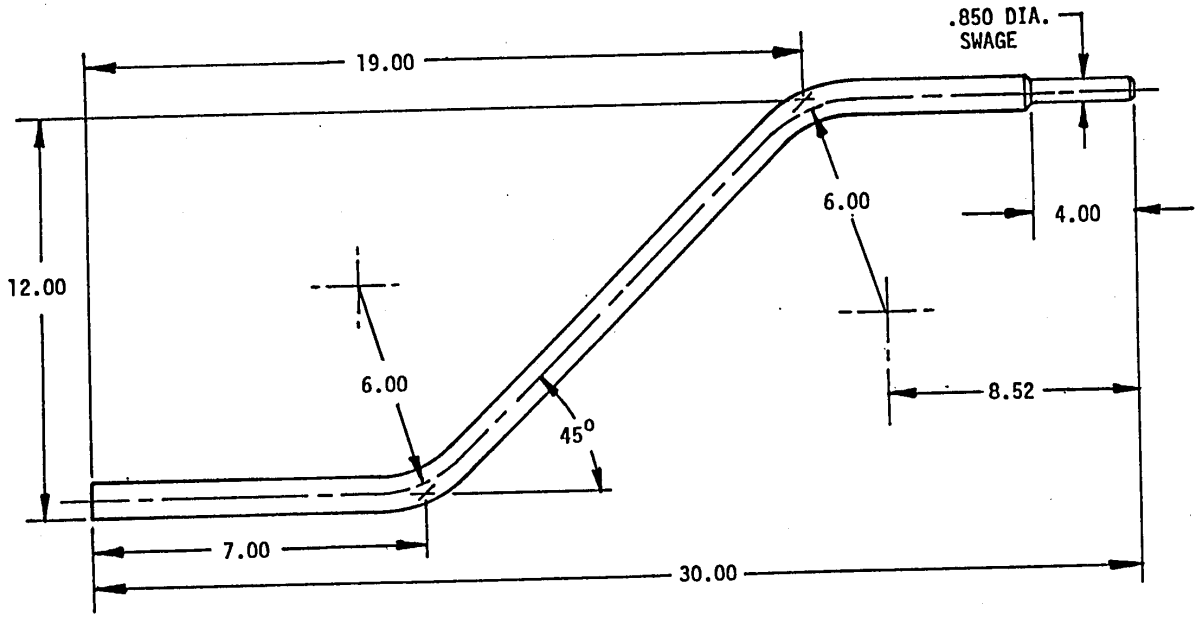


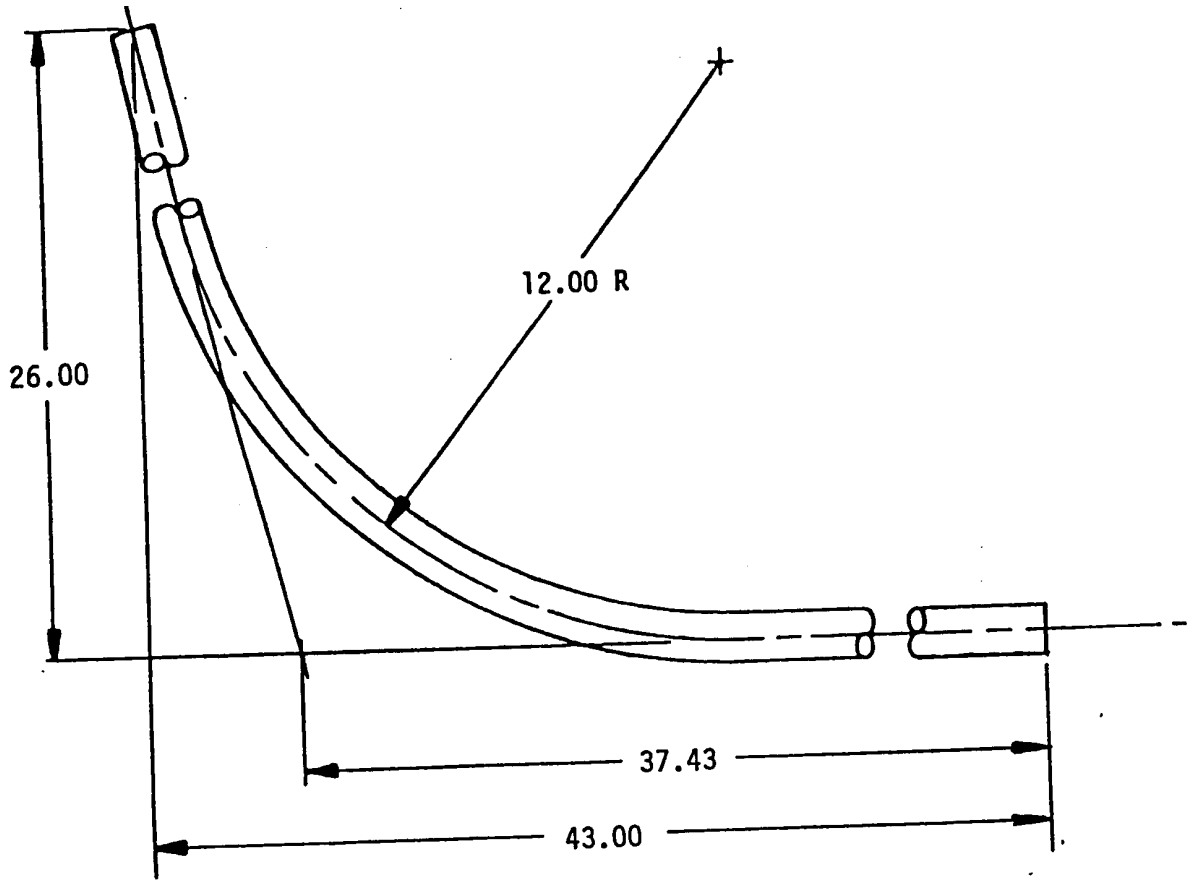
FIGURE 124. Frame to vehicle installation.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

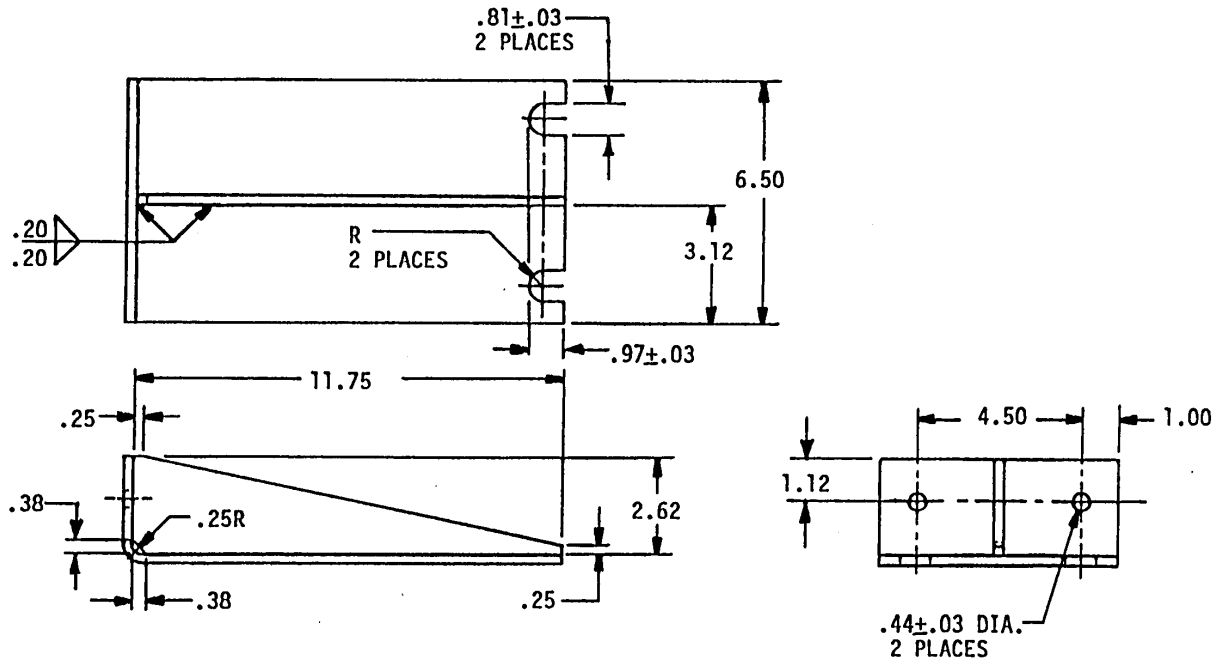
FIGURE 125. Tube, top frame.



NOTES:

1. Material: Tube, steel, UNS 1010 to 1020, welded, 1.00 inch O.D. x 0.058 inch wall.
2. Optional material: Tube, steel, ASTM A513.
3. Inside diameter of tube shall be free of burrs.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

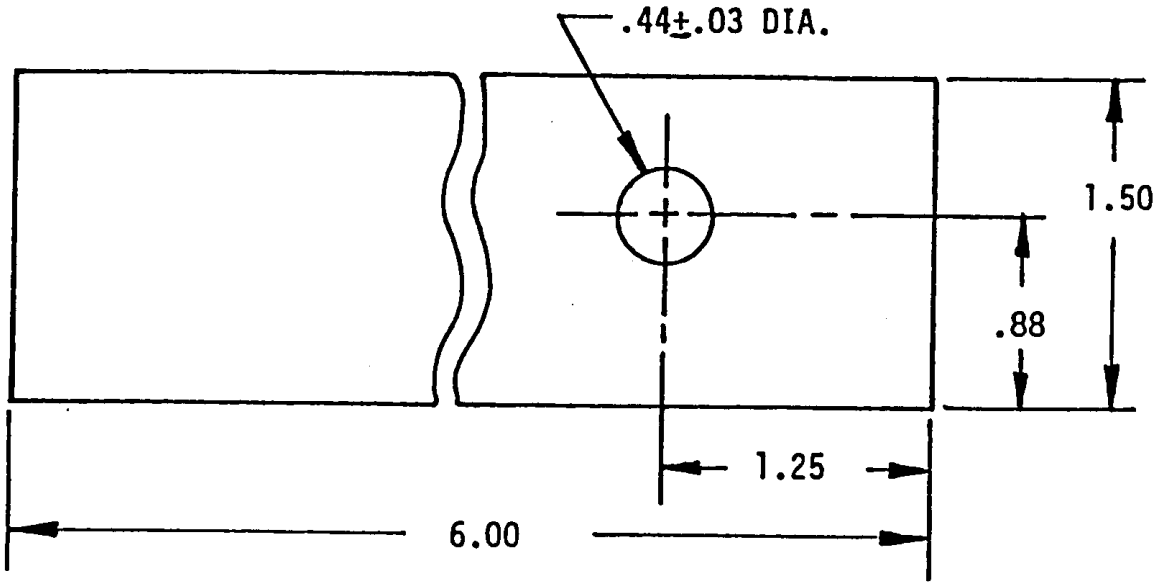
FIGURE 126. Tube, top frame.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576, 0.25 inch thick.
2. All weld sizes are minimum.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
5. One (1) bracket is required for M1A1 and two (2) brackets are required for M1 and Improved.

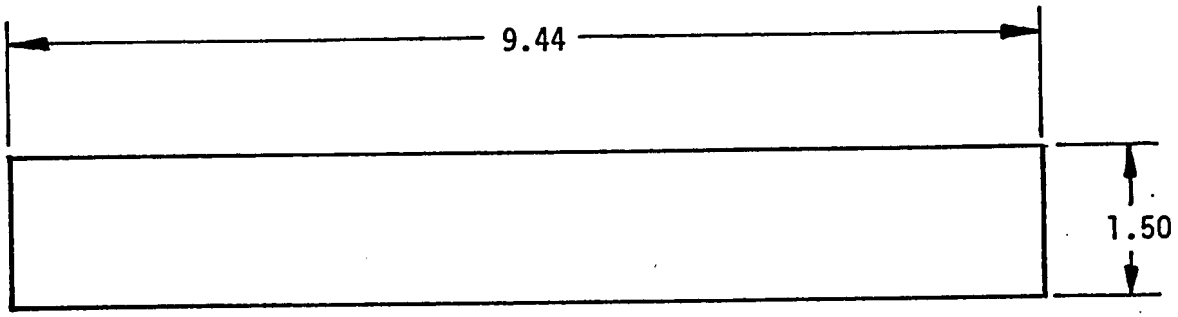
FIGURE 127. Bracket.



NOTES:

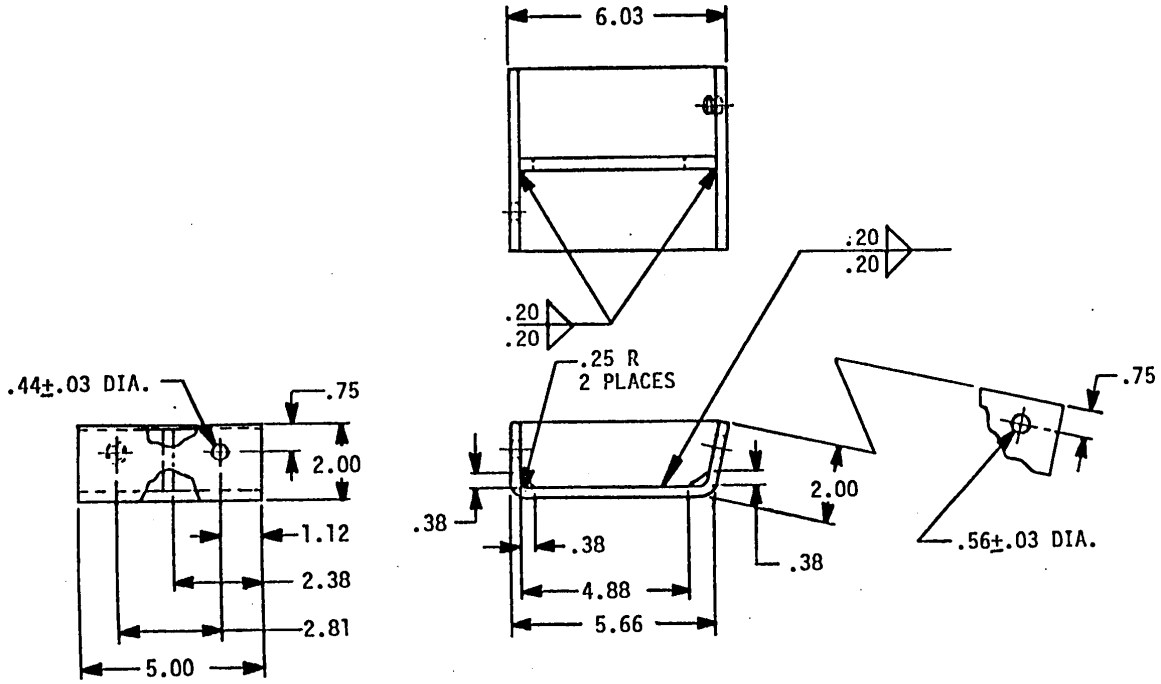
1. Material: Aluminum alloy 6061, temper T651, QQ-A-250/11, 0.25 inch thick.
2. Remove all burrs and sharp edges.
3. Two (2) plates are required.

FIGURE 128. Plate, splice.



NOTES:
1. Material: Aluminum alloy 6061, temper T651, QQ-A-250/8.
2. Remove all burrs and sharp edges.

FIGURE 129. Plate.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A36 or ASTM A576, 0.25 inch thick.
2. All weld sizes are minimum.
3. Remove all burrs and sharp edges.
4. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 130. Bracket.

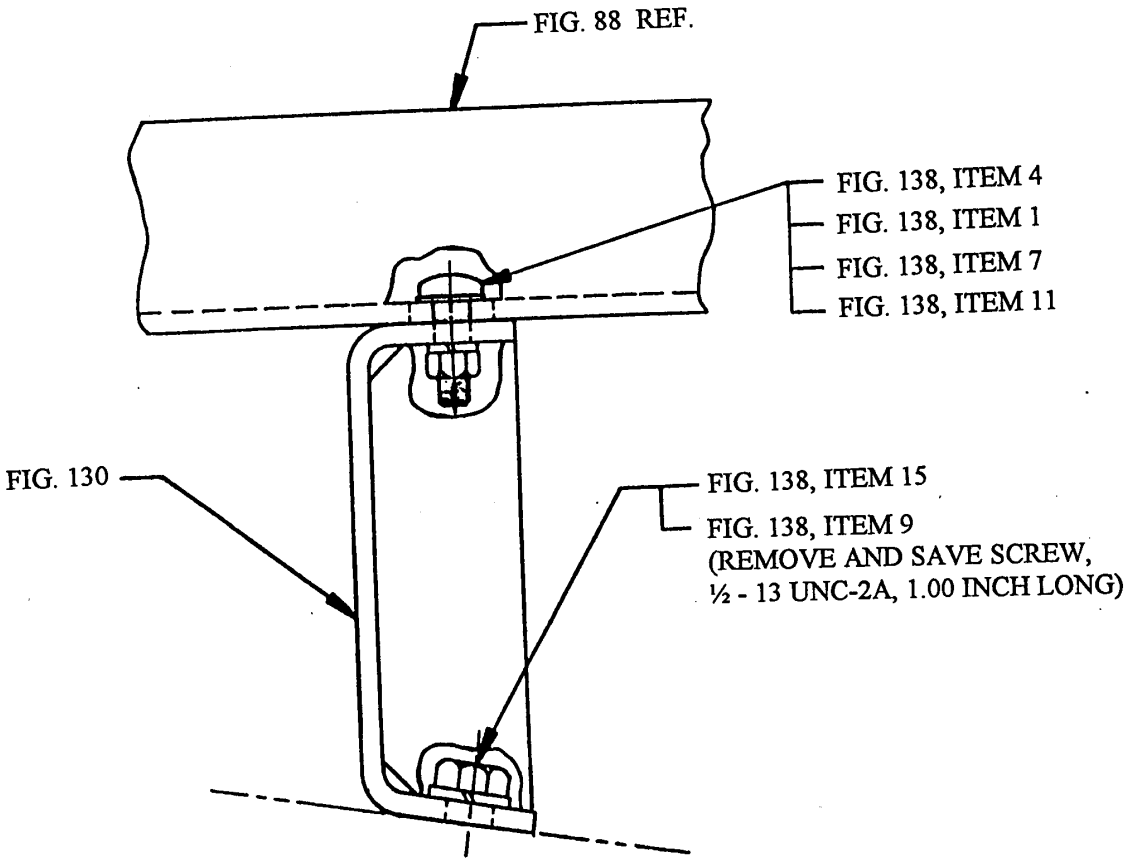
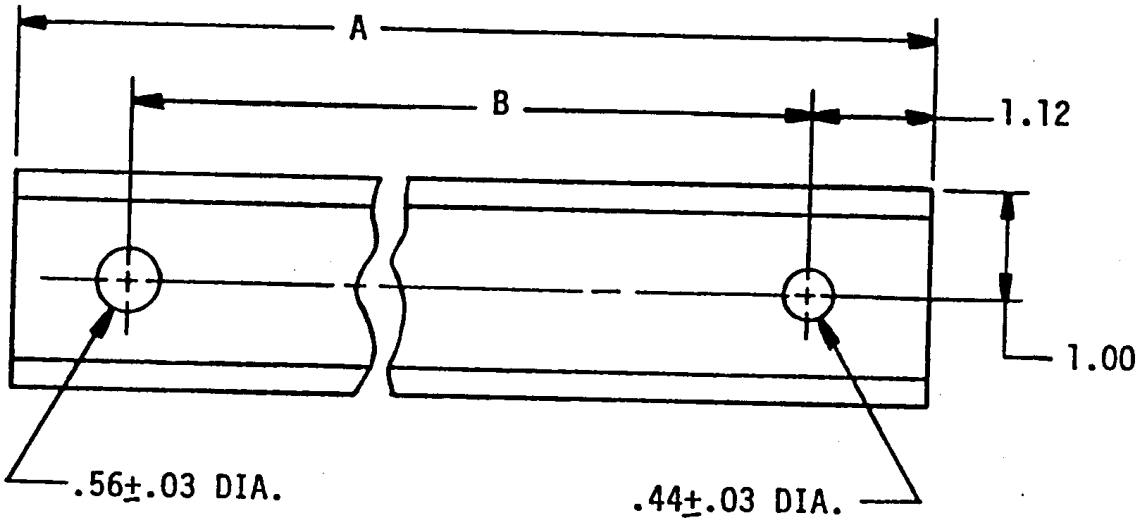


FIGURE 131. Frame to vehicle installation.



Item No.	Number required	A	B
1	4	5.00	2.81
2	1	11.03	8.84
3	1	11.25	9.06

NOTES:

1. Material: Steel, channel, UNS 1020, ASTM A36 or ASTM A576, 2.00 x 0.63 x 0.25 inch.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 132. Channel.

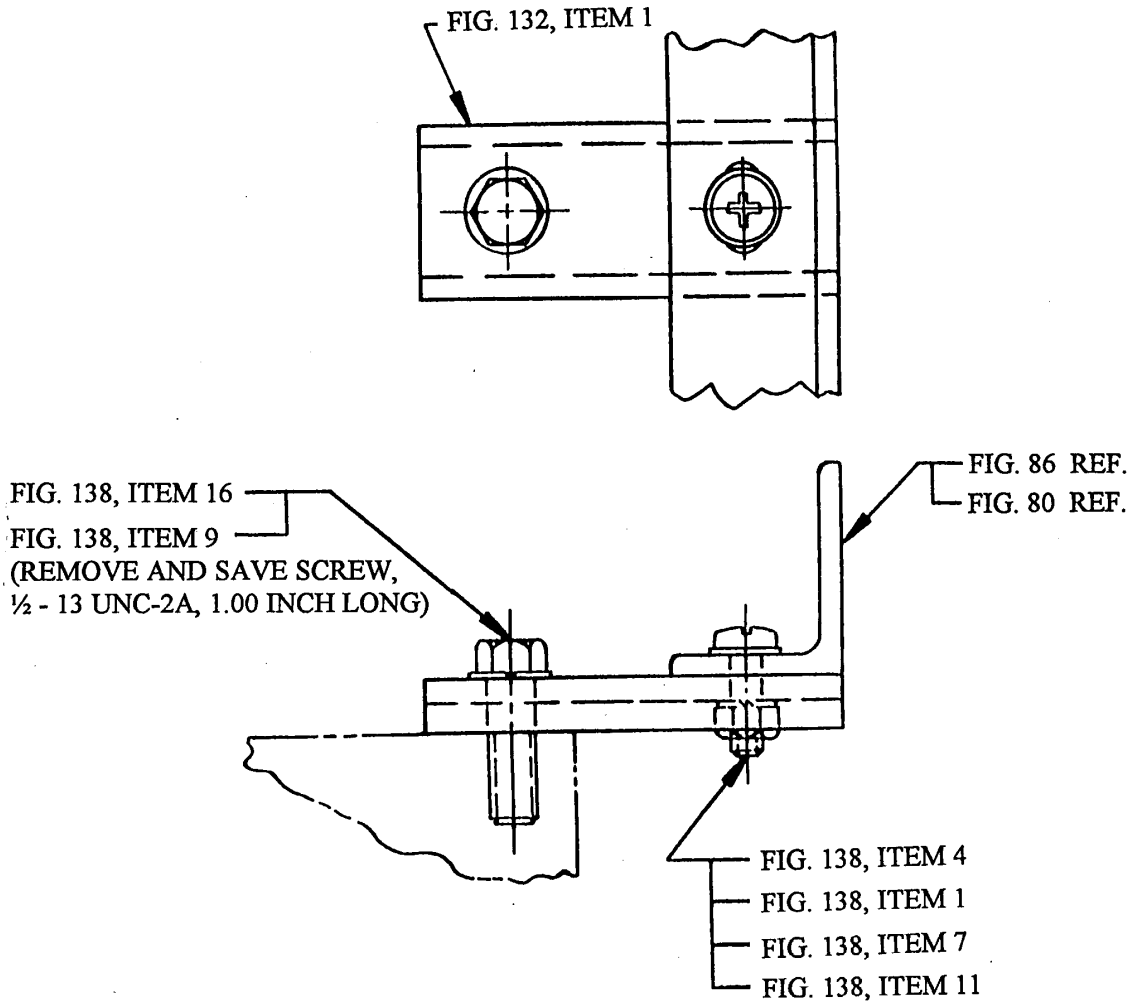


FIGURE 133. Frame to vehicle installation.

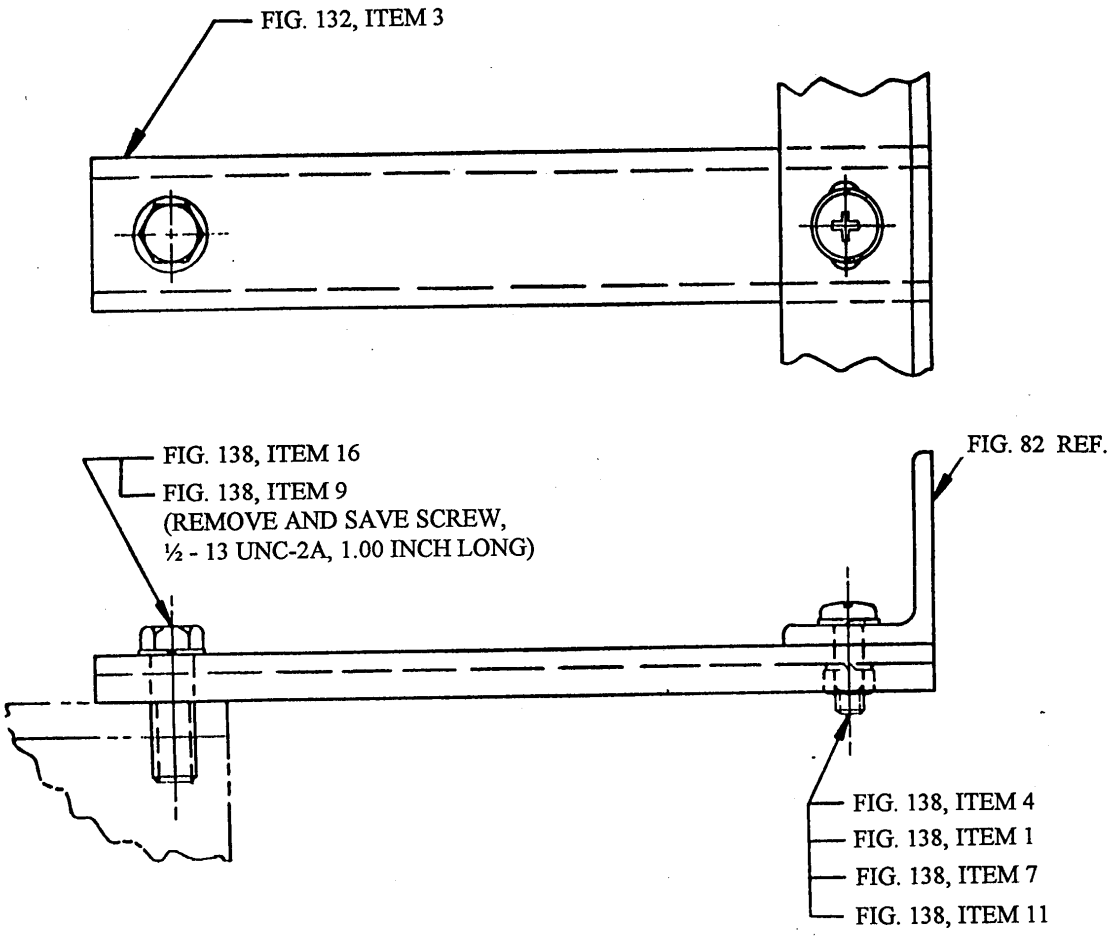


FIGURE 134. Frame to vehicle installation.

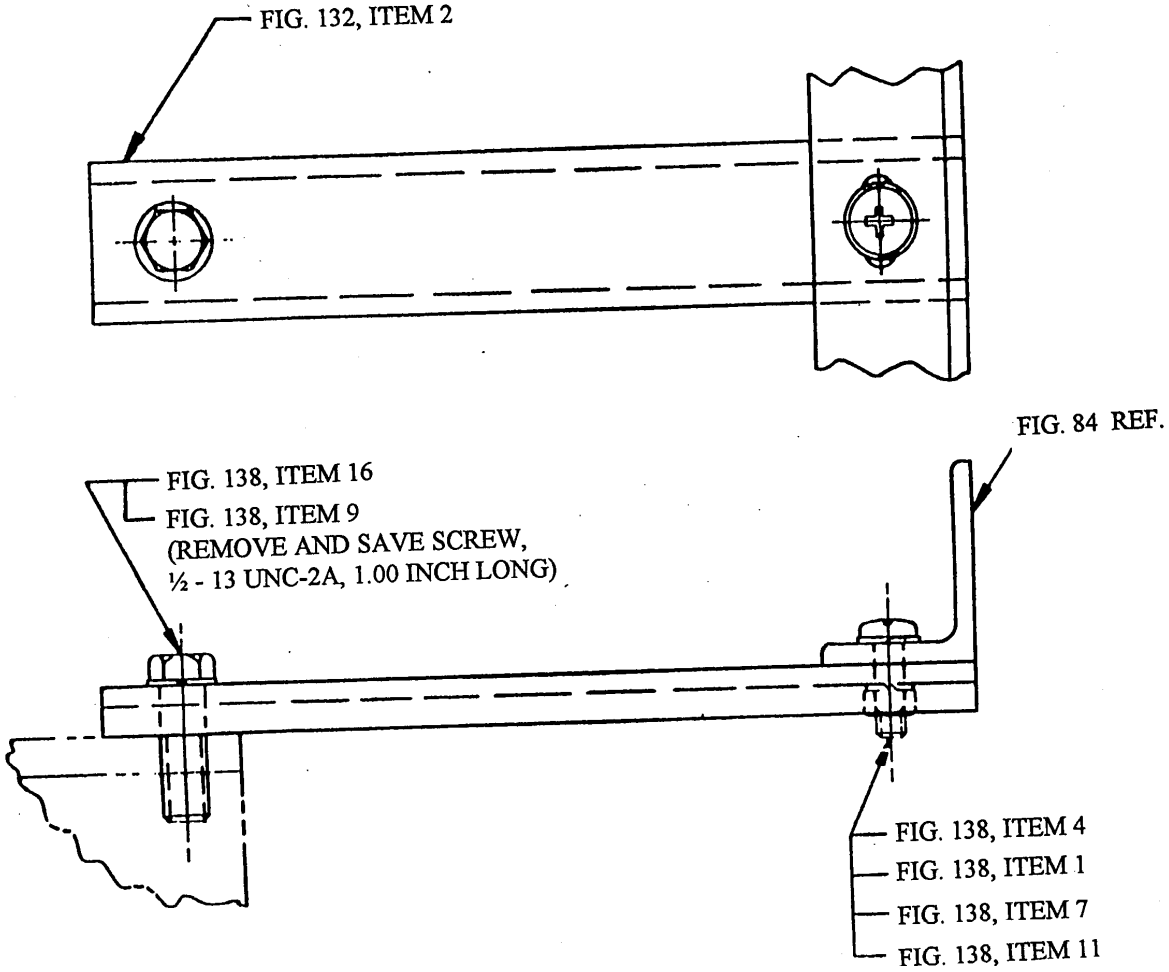
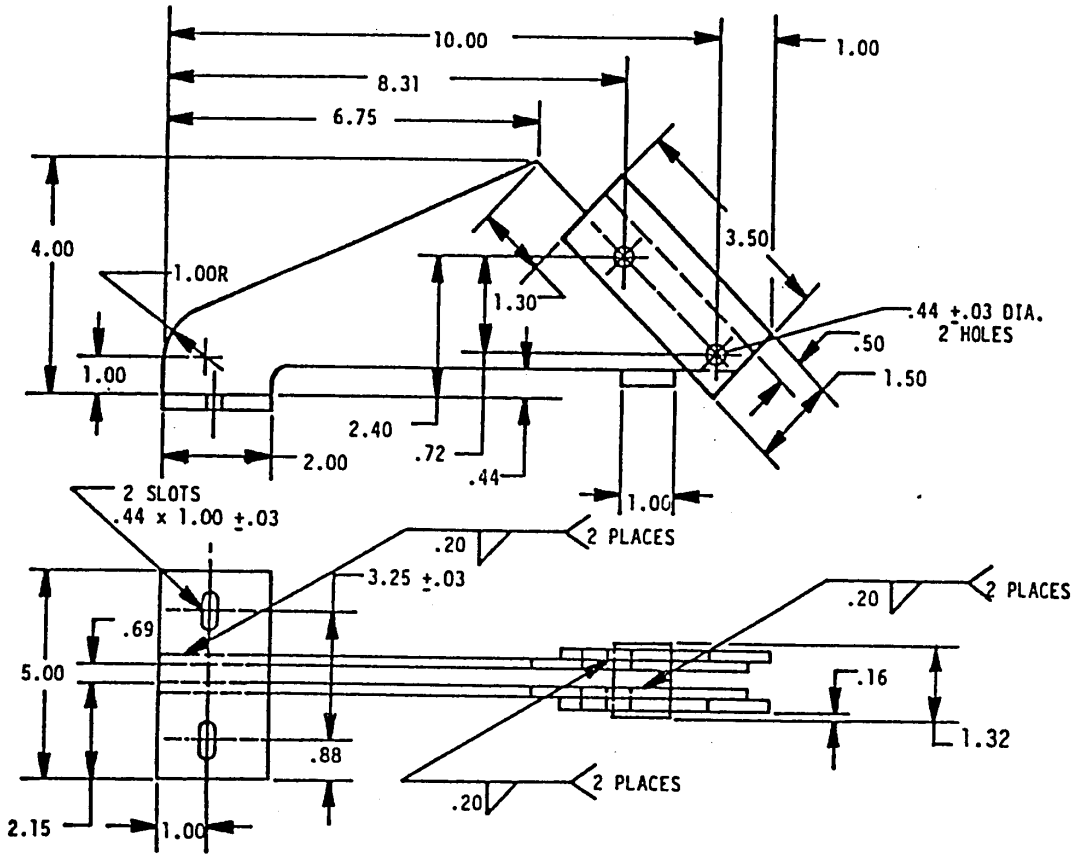


FIGURE 135. Frame to vehicle installation.



NOTES:

1. Material: Steel, carbon, ASTM A36 or UNS 1010 to 1020, ASTM A576, 0.125 inch thick.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Two (2) brackets are required.

FIGURE 136. Bracket.

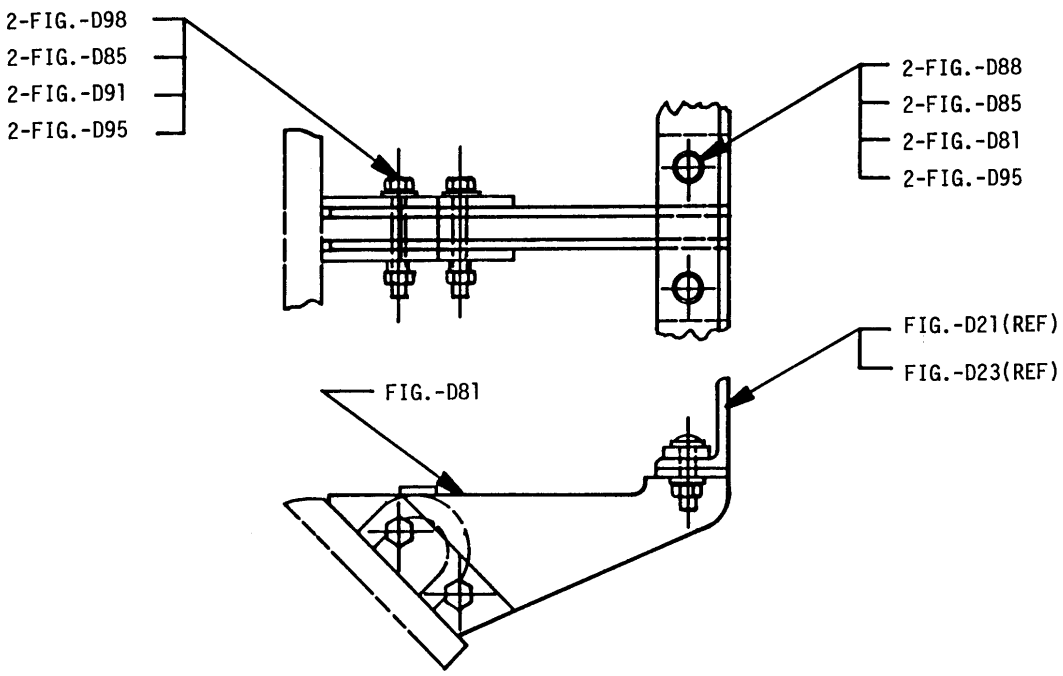
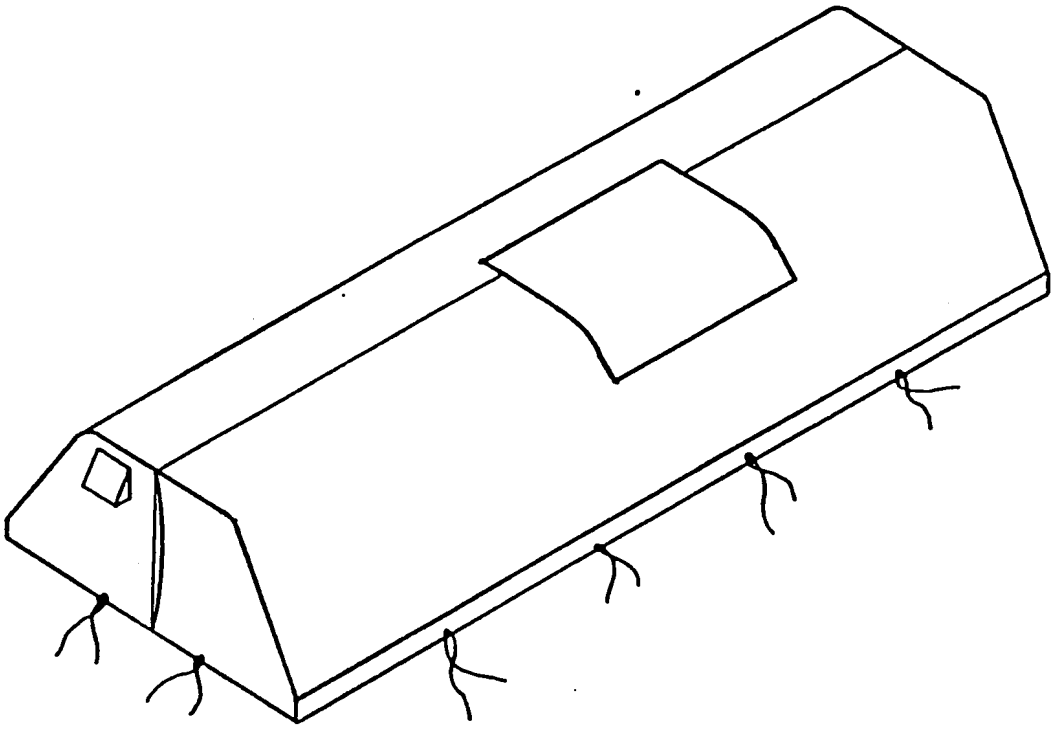


FIGURE 137. Frame to vehicle installation.

Item	No. req'd	Description	Material
1	95	3/8 inch plain washer, SAE size, type A, American National Standard	Steel, zinc-plated
2	4	1/2 inch plain washer, SAE size, type A, American National Standard	Steel, zinc-plated
3	4	3/4 inch plain washer, SAE size, type A, American National Standard	Steel, zinc-plated
4	85	3/8 inch machine screw, pan head, type II cross-recessed, 16 UNC-2A, 1.25 inch long, American National Standard	Carbon steel, zinc-plated
5	36	5/16 inch lock washer, external tooth, American National Standard	Carbon steel, zinc-plated
6	36	5/16 inch lock washer, helical-spring, regular, American National Standard	Carbon steel, zinc-plated
7	89	3/8 inch lock washer, helical-spring, regular, American National Standard	Carbon steel, zinc-plated
8	2	7/16 inch lock washer, helical-spring, regular, American National Standard	Carbon steel, zinc-plated
9	12	1/2 inch lock washer, helical-spring, regular, American National Standard	Carbon steel, zinc-plated
10	36	5/16 inch plain nut, hex jam, 24 UNF-2B, American National Standard	Steel, zinc-plated
11	81	3/8 inch hex nut, 16 UNC-2B, American National Standard	Steel, zinc-plated
12	36	5/16 inch hex nut, 24 UNF-2B, American National Standard	Steel, zinc-plated
13	36	5/16 inch cap screw, hexagon head, 24 UNF-2A, 1.25 inch long, American National Standard	Steel, zinc-plated
14	4	3/8 inch screw, hex head, 16 UNC-2A, 2.25 inch long	Steel, grade 8, zinc-plated
15	1	1/2 inch screw, hex head, 13 UNC-2A, 1.38 inch long	Steel, grade 8, zinc-plated
16	7	1/2 inch screw, hex head, 13 UNC-2A, 1.75 inch long	Steel, grade 8, zinc-plated
17	4	3/4 inch screw, hex head, 10 UNC-2A, 2.75 inch long	Steel, grade 8, zinc-plated

FIGURE 138. Hardware, base frame.



NOTES:

1. Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087 of FED-STD-595, except weight shall be 14 ounce per square yard and coating shall be balanced.
2. Stitching: Type 301 per FED-STD-751, 8 to 10 stitches per inch. Smallest needle size feasible should be used in order to assure weatherproof seams.
3. Thread: Nylon, type I, class 1, size F, color OD, shade S-1, cable no. 66022, V-T-295.
4. Manufacturer shall be responsible for final fit of cover. Seam allowance may vary to suit manufacturer. Seams shall be either vertical or horizontal. Material width shall be maximum available standard size.

FIGURE 139. Cover assembly.

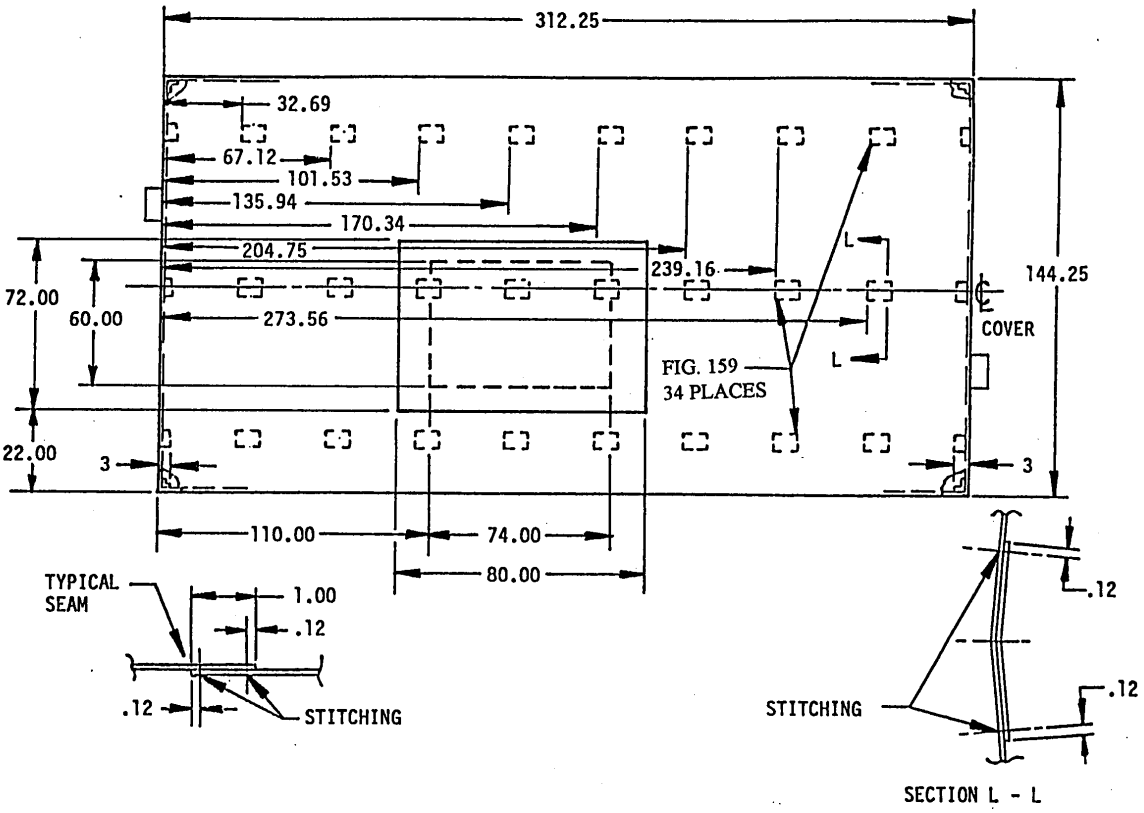
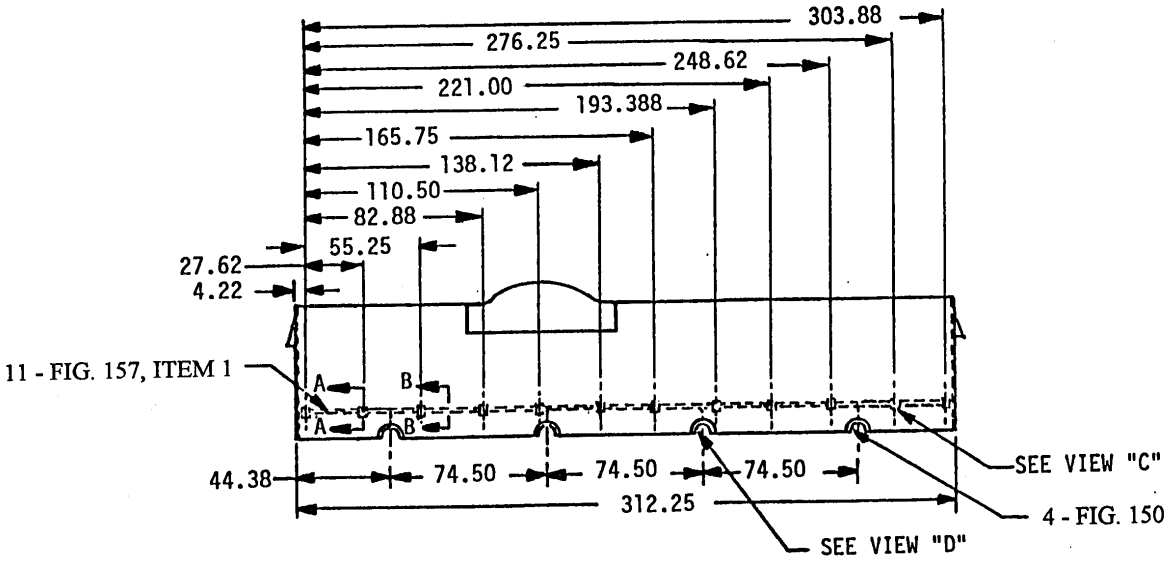


FIGURE 140. Plan view cover, installed.



NOTES:

1. Stitching: Type 301 per FED-STD-751, 8 to 10 stitches per inch. Smallest needle size feasible should be used in order to assure weatherproof seams.
2. Thread: Nylon, type I, class 1, size F, color OD 5, shade S-1, cable no. 66022, V-T-295.
3. Manufacturer shall be responsible for final fit of cover. Manufacturer's identification shall appear on inside of cover. Seam allowance may vary to suit manufacturer.

FIGURE 141. Cover installed, left side elevation.

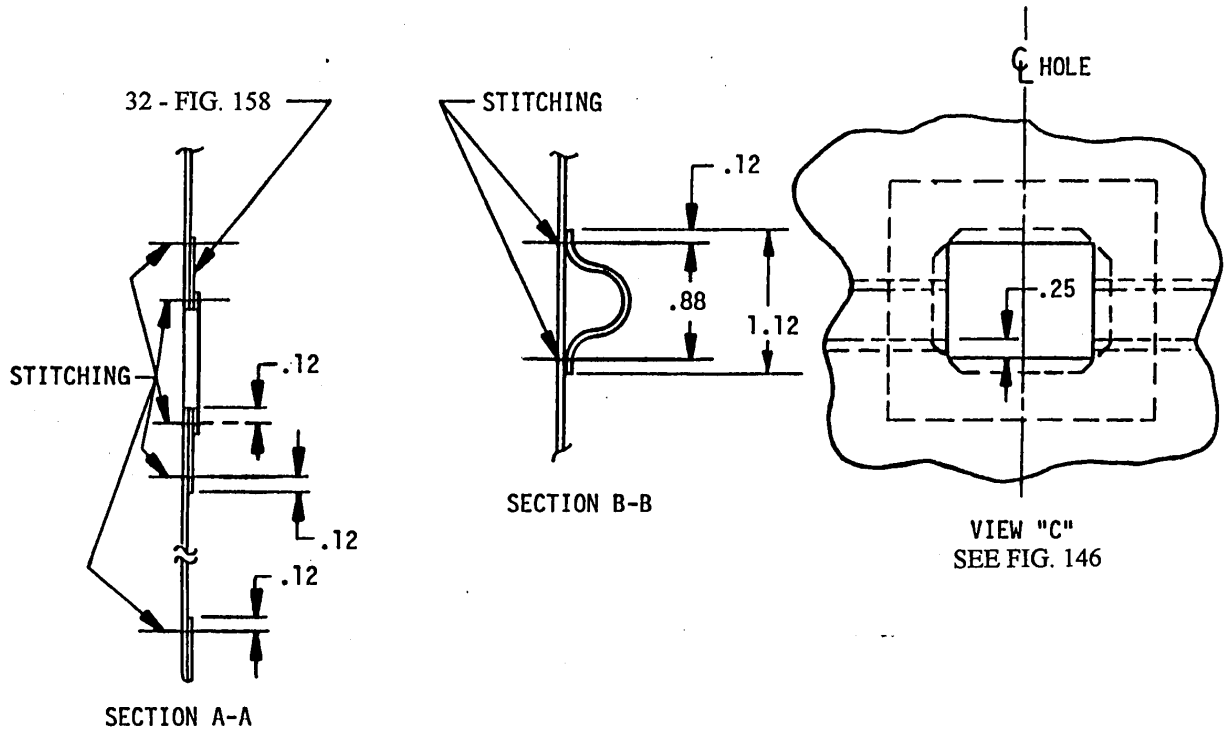


FIGURE 142. Sections and view for figures 141, 143, and 144.

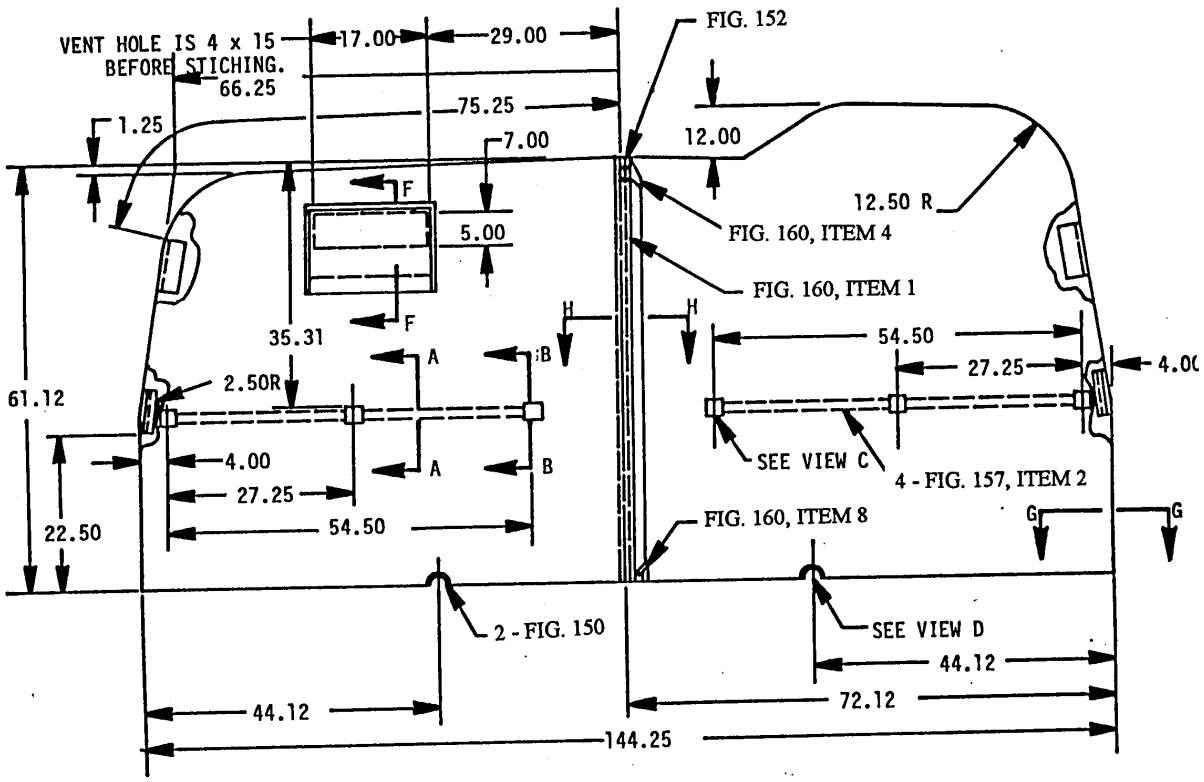


FIGURE 143. Front elevation cover installed (see figures 142, 145, 154, and 155).

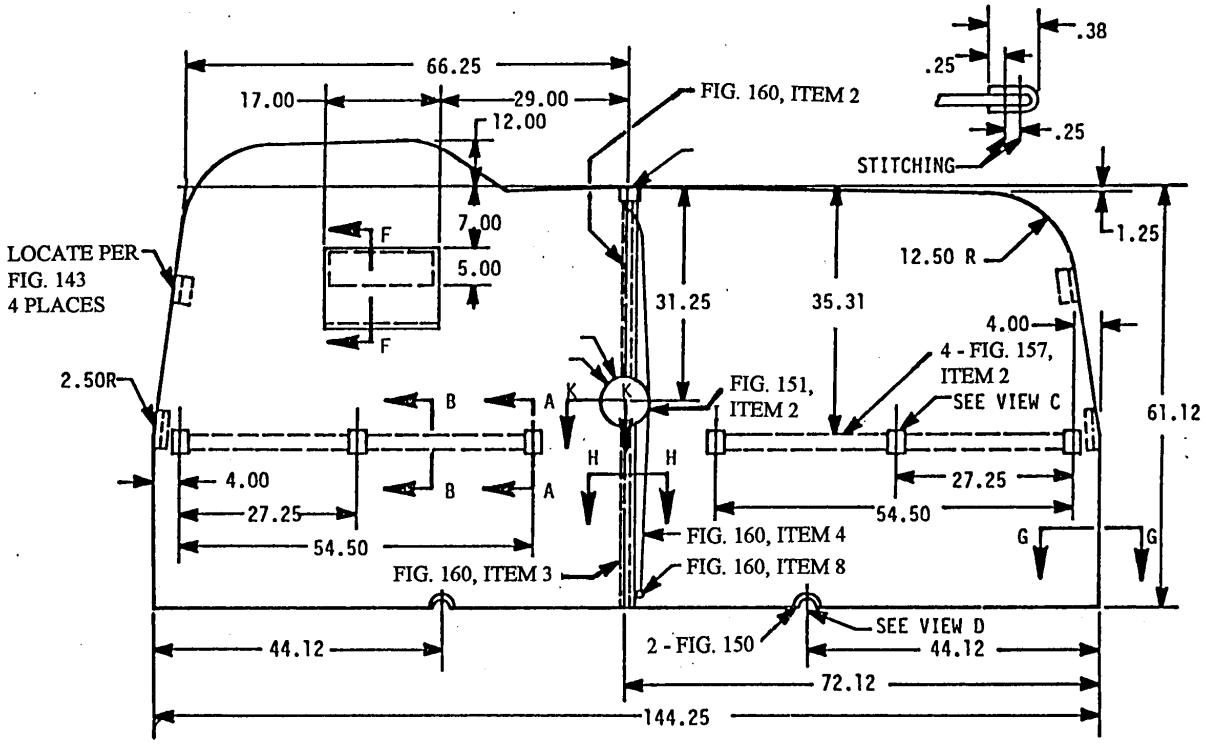


FIGURE 144. Rear elevation cover installed (see figures 142, 145, 154, and 155).

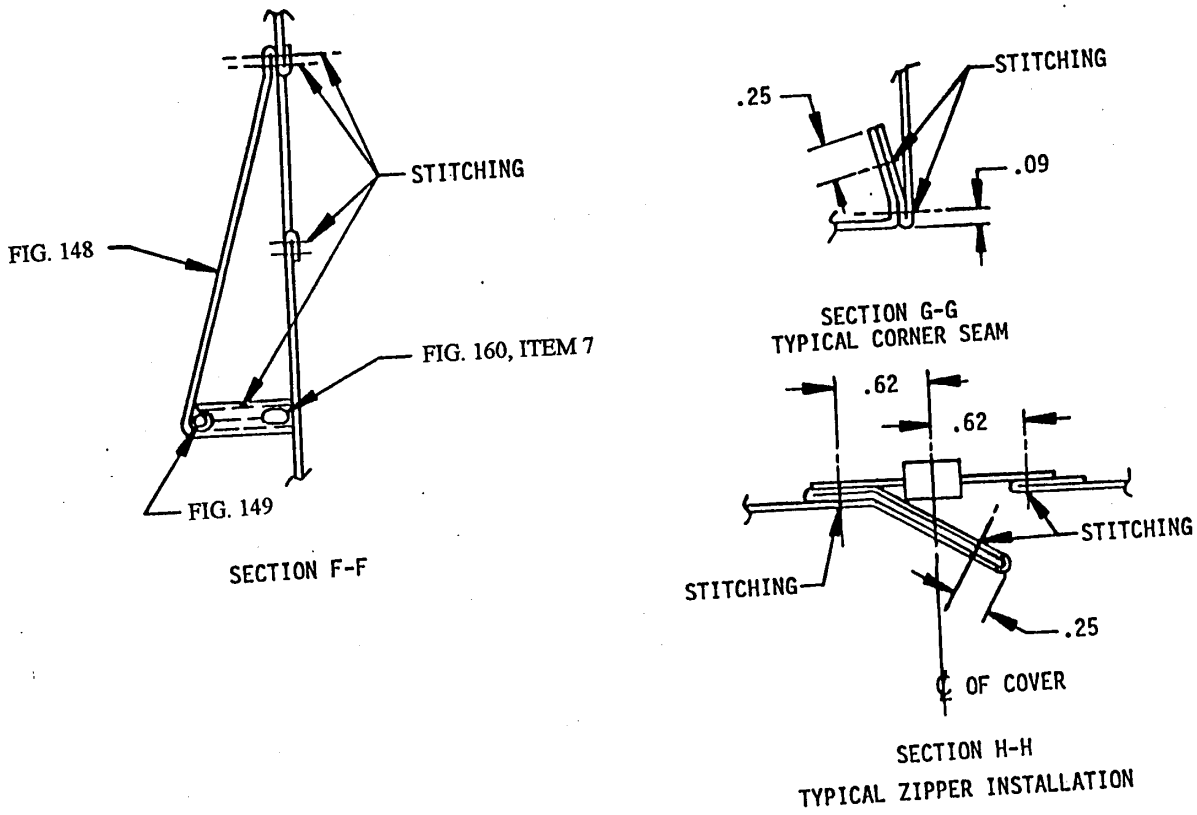


FIGURE 145. Section views for figures 143 and 144.

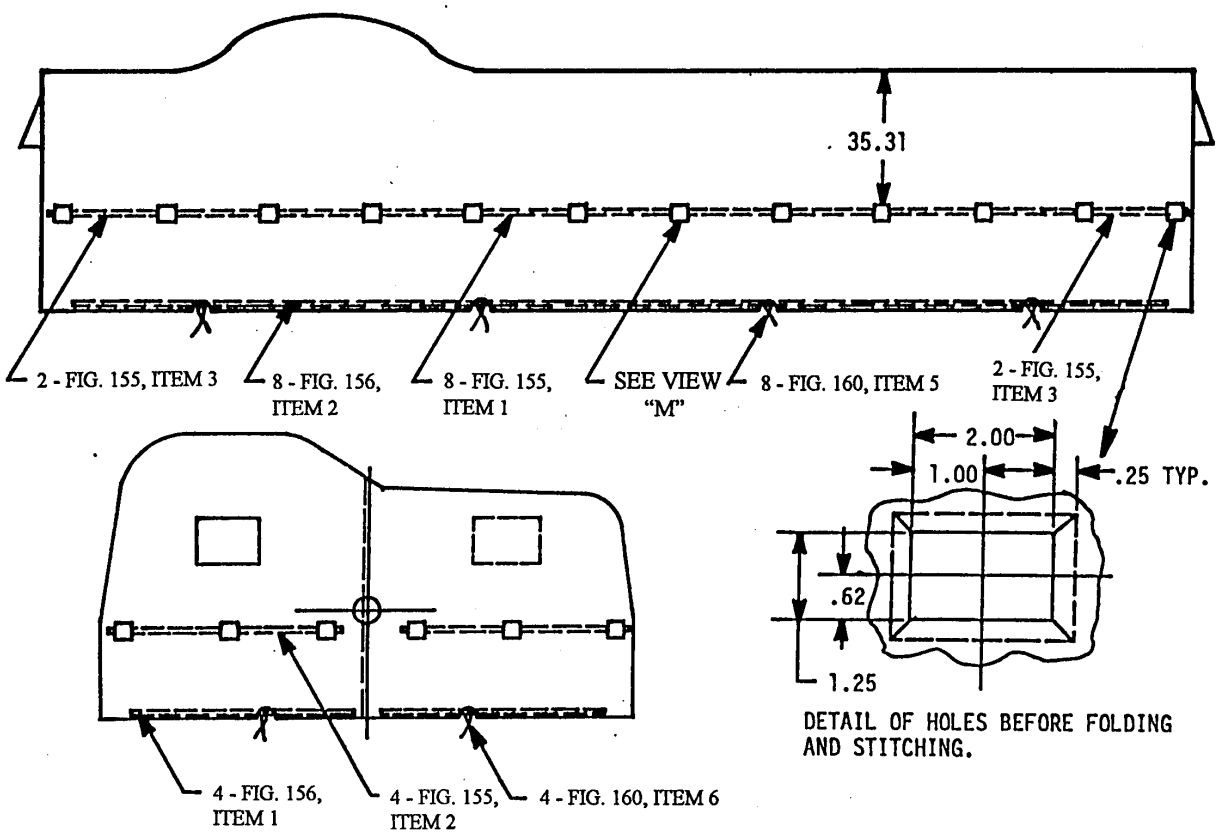


FIGURE 146. Side and rear elevations (see figure 147).

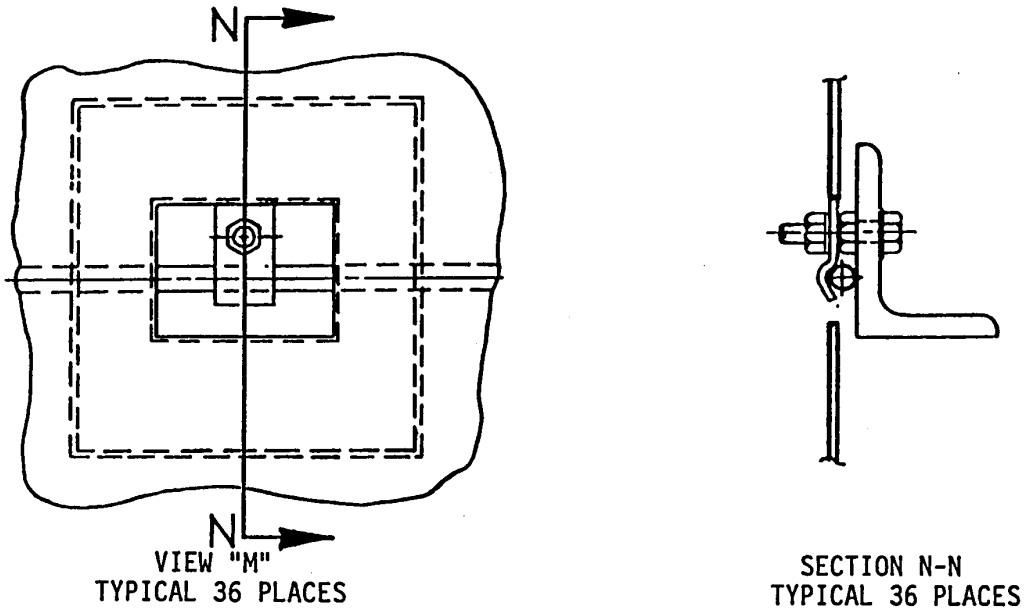
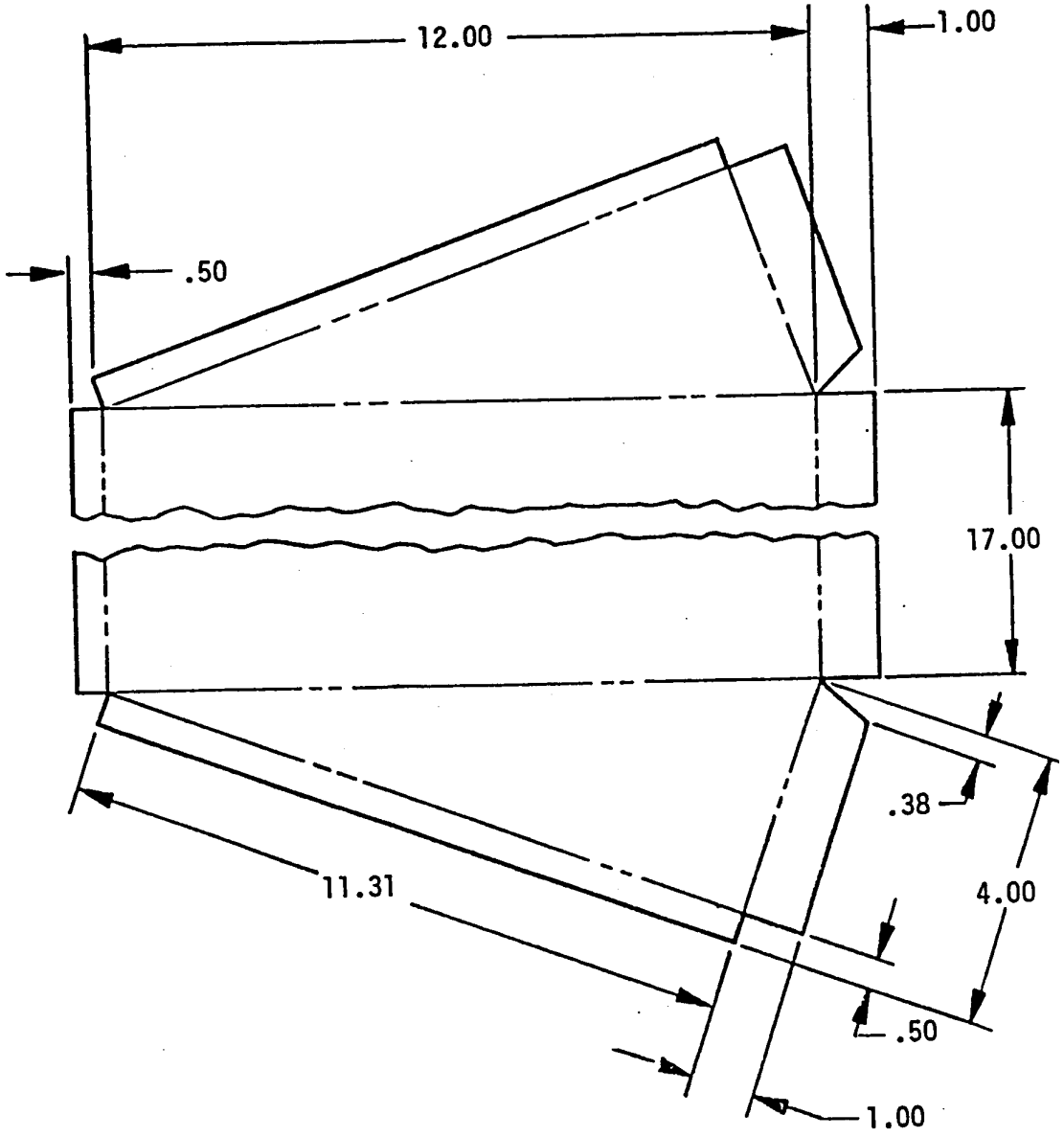


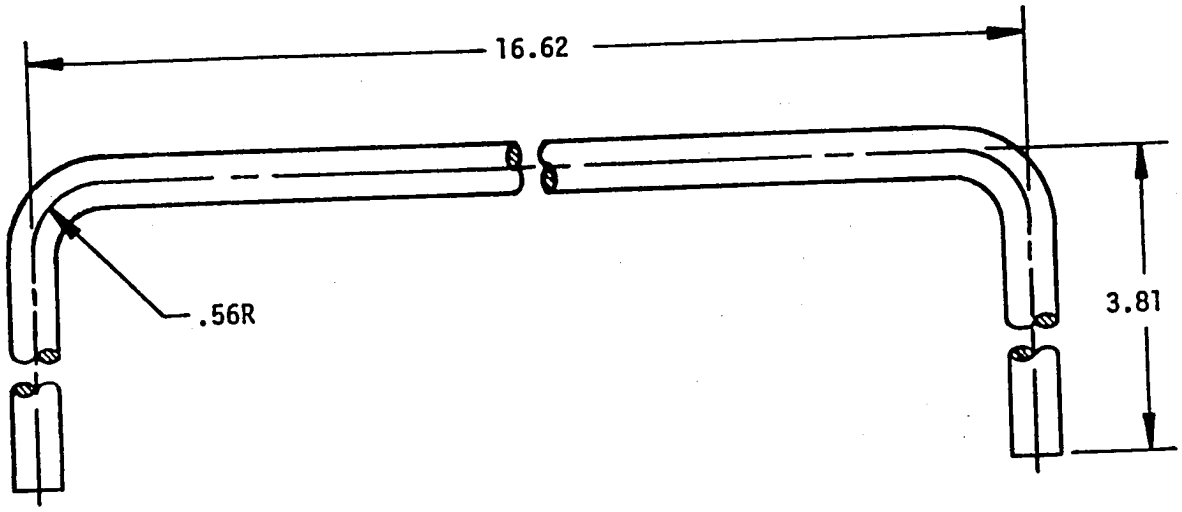
FIGURE 147. Section and view for figure 146.



NOTES:

1. Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087 of FED-STD-595, except weight shall be 18 ounces per square yard and coating shall be balanced.
2. Two (2) vent covers are required.

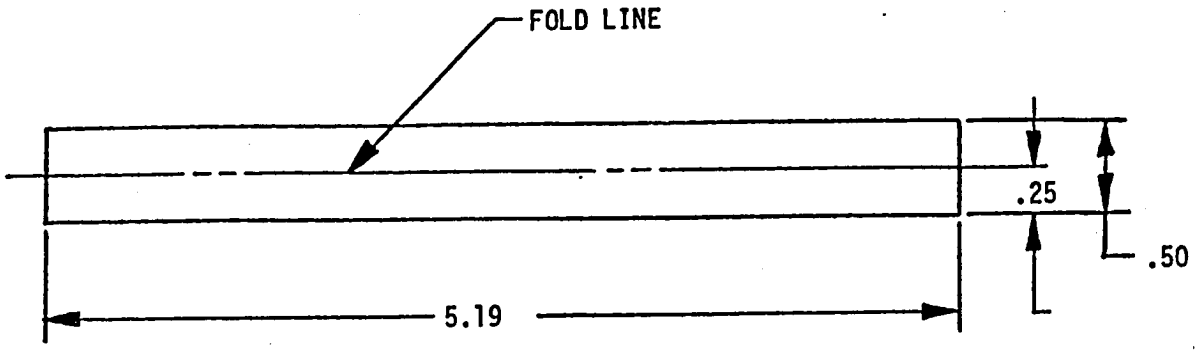
FIGURE 148. Vent cover.



NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.38 inch diameter.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.
4. Two (2) vents are required.

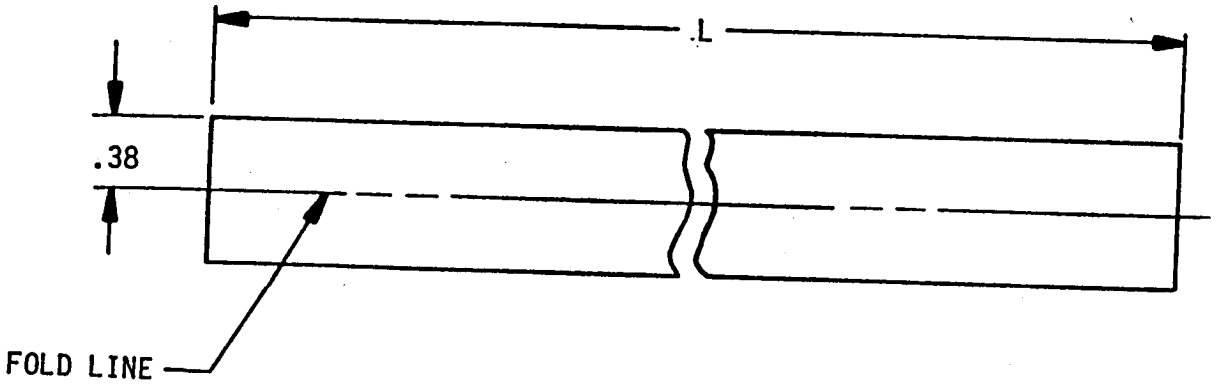
FIGURE 149. Vent, reinforcement.



NOTES:

1. Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087, FED-STD-595, except weight shall be 14 ounces per square yard and coating shall be balanced.
2. Twelve (12) bindings are required.

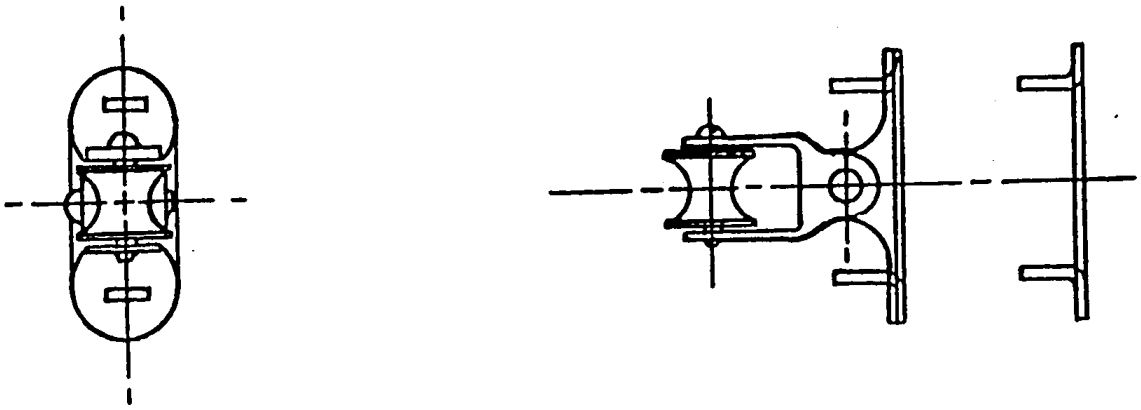
FIGURE 150. Binding.



Item no.	L	Number required
1	14.00	1
2	9.50	1

NOTE:
Material: Webbing, cotton, type II, class 4, color OD-7, MIL-W-530, 0.75 inch wide.

FIGURE 151. Reinforcement.



NOTE:
Two (2) pulleys are required.

FIGURE 152. Pulley assembly.

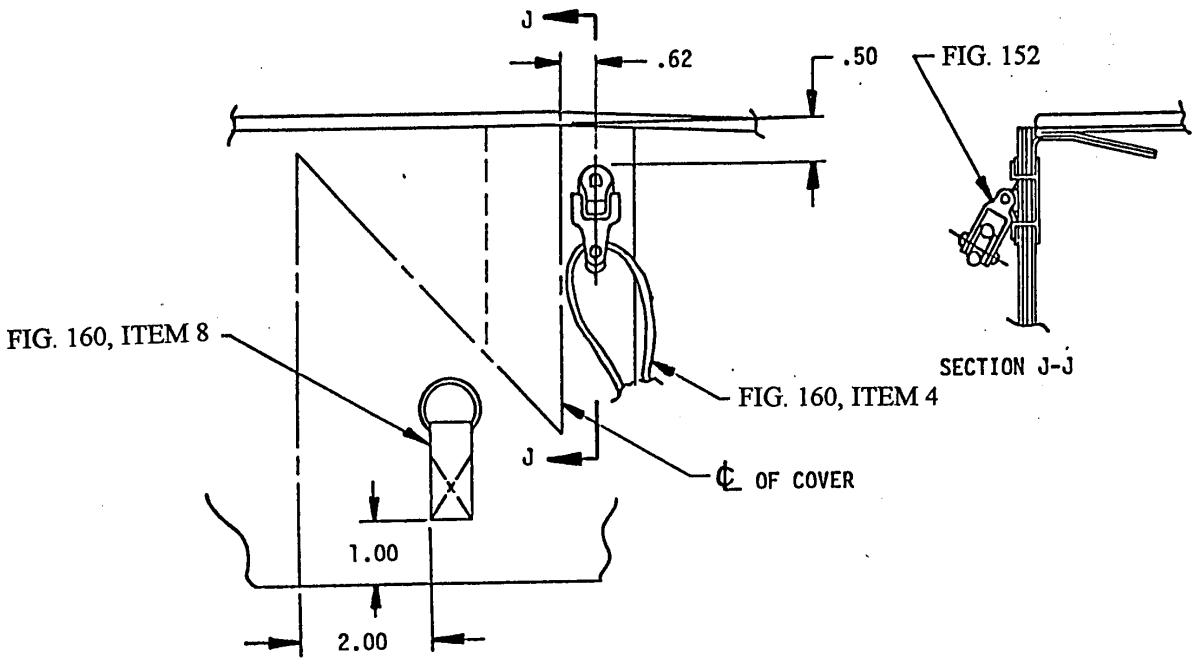


FIGURE 153. Pulley installation front and rear.

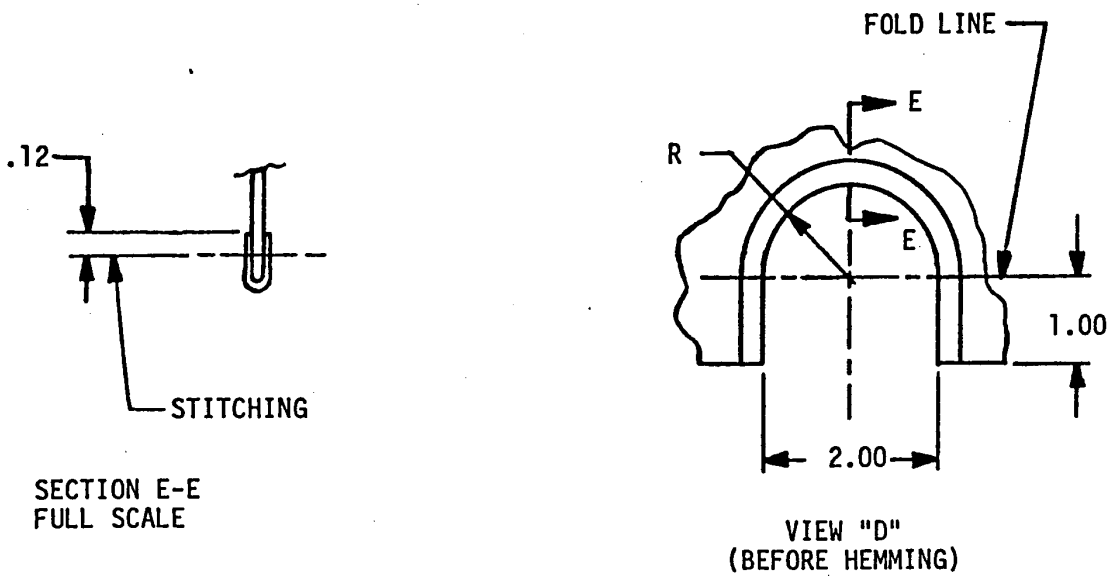
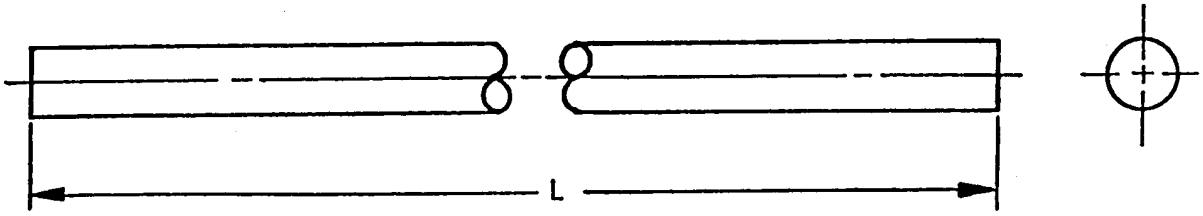


FIGURE 154. Section and view for figures 141, 143, and 144.

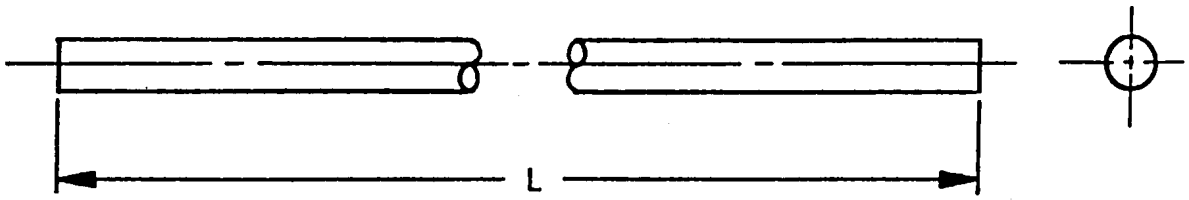


Item no.	L	Number required
1	56.00	8
2	62.00	4
3	41.00	4

NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.375 inch diameter.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 155. Rod.

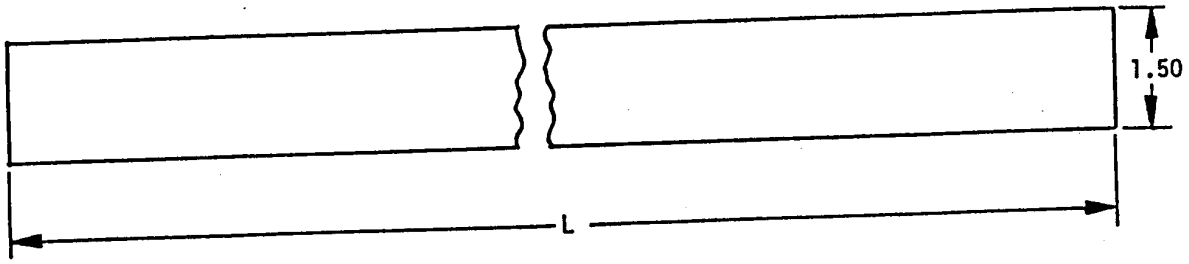


Item no.	L	Number required
1	60.00	4
2	72.00	8

NOTES:

1. Material: Steel, UNS 1015 to 1025, ASTM A576 or ASTM A108, 0.25 inch diameter.
2. Remove all burrs and sharp edges.
3. Final finish: Treat per type I or III, TT-C-490. Prime per MIL-P-53022 or MIL-P-53030. Topcoat green 383 per MIL-C-46168 or MIL-C-53039.

FIGURE 156. Rod, tie down.

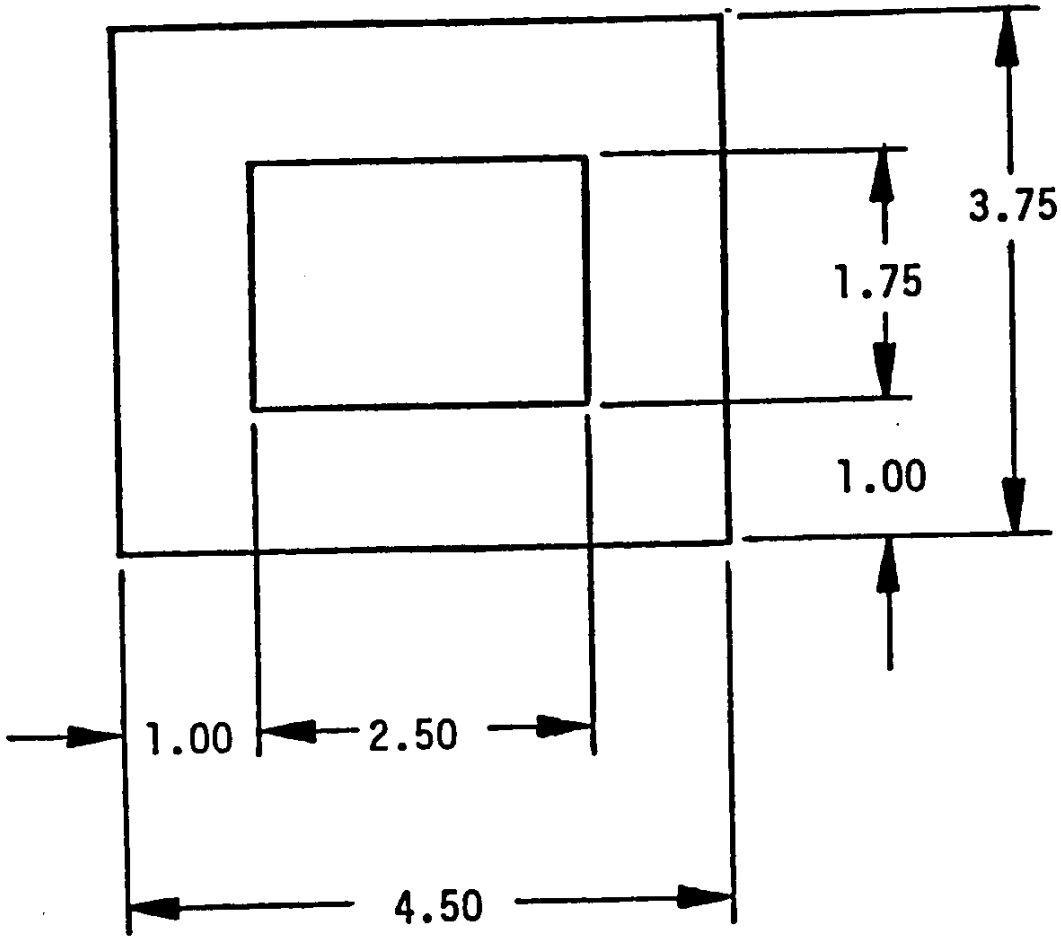


Item no.	L	Number required
1	25.12	22
2	24.75	8

NOTE:

Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087, FED-STD-595, except weight shall be 14 ounces per square yard and coating shall be balanced.

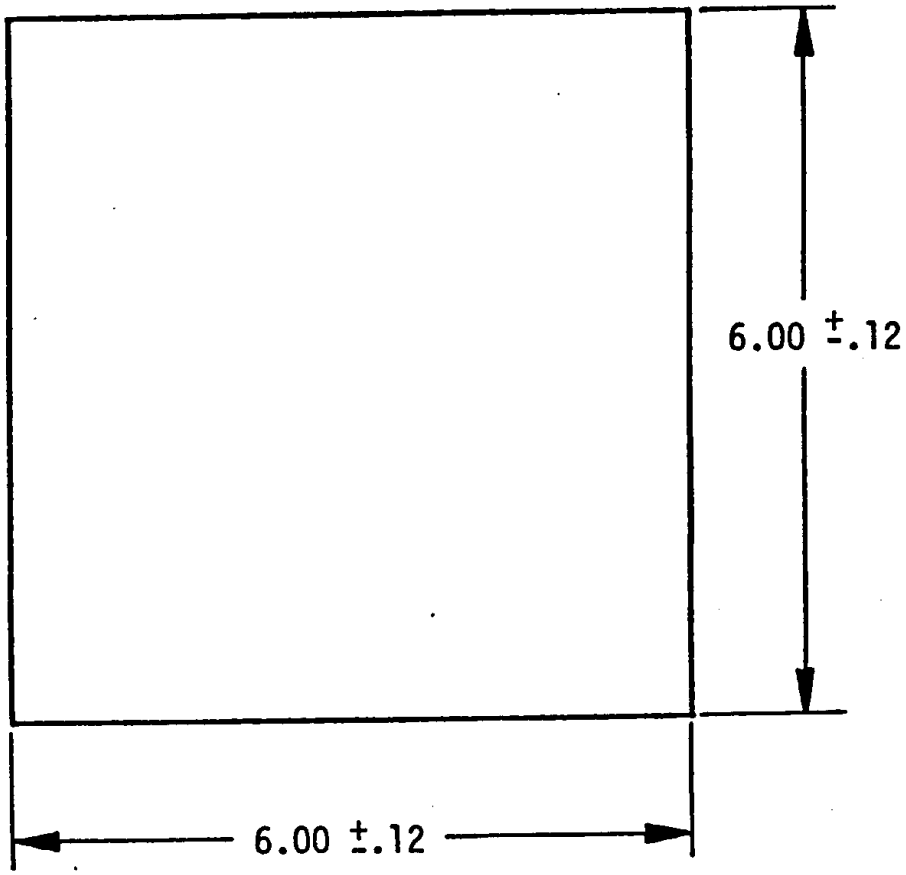
FIGURE 157. Strip, tie down.



NOTES:

1. Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087, FED-STD-595, except weight shall be 14 ounces per square yard and coating shall be balanced.
2. Thirty-six (36) reinforcements are required.

FIGURE 158. Reinforcement, tie down.



NOTES:

1. Material: Coated nylon cloth, type II, class 3, MIL-C-20696, color green 34087, FED-STD-595, except weight shall be 14 ounces per square yard and coating shall be balanced.
2. Thirty-four (34) reinforcements are required.

FIGURE 159. Reinforcement.

Item no.	Number required	Description	Specification
1	1	Double fastener, slide, interlocking, non-separating, heavy duty (single action, open top, closed bottom with non-lock, double pull, reversible slider), 58 inches long.	V-F-106, style 1, size H
2	1	Fastener, slide, interlocking, non-separating, heavy duty (single action, open top, closed bottom with non-lock, double pull, reversible slider), 26 inches long.	V-F-106, style 1, size H
3	1	Fastener, slide, interlocking, separating, heavy duty (regular, left hand with non-lock, double pull, reversible slider), 25 inches long.	V-F-106, style 1, size H
4	2	Rope, jute, type II, mildew resistant, 0.25 inch diameter, 145 inches long.	T-R-650
5	8	Rope, jute, type II, mildew resistant, 0.25 inch diameter, 120 inches long.	T-R-650
6	4	Rope, jute, type II, mildew resistant, 0.25 inch diameter, 72 inches long.	T-R-650
7	4	Tip, rubber, 0.38 inch inside diameter, 1 inch minimum overall height	----------
8	2	Chape, web, type 3, with D ring	Part No. 547557

FIGURE 160. Parts, closure attachment.

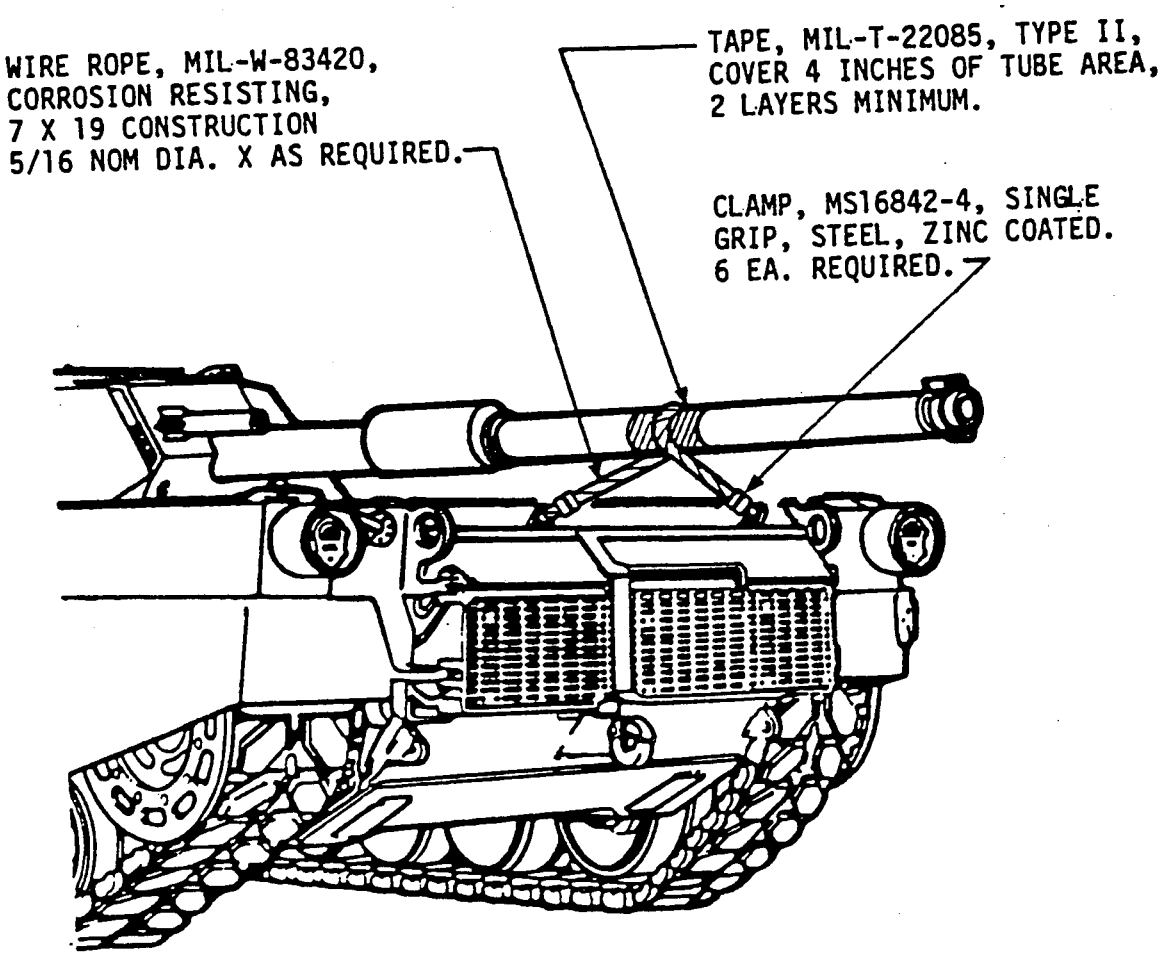


FIGURE 161. Securing of gun tube.